conservation and open space elements

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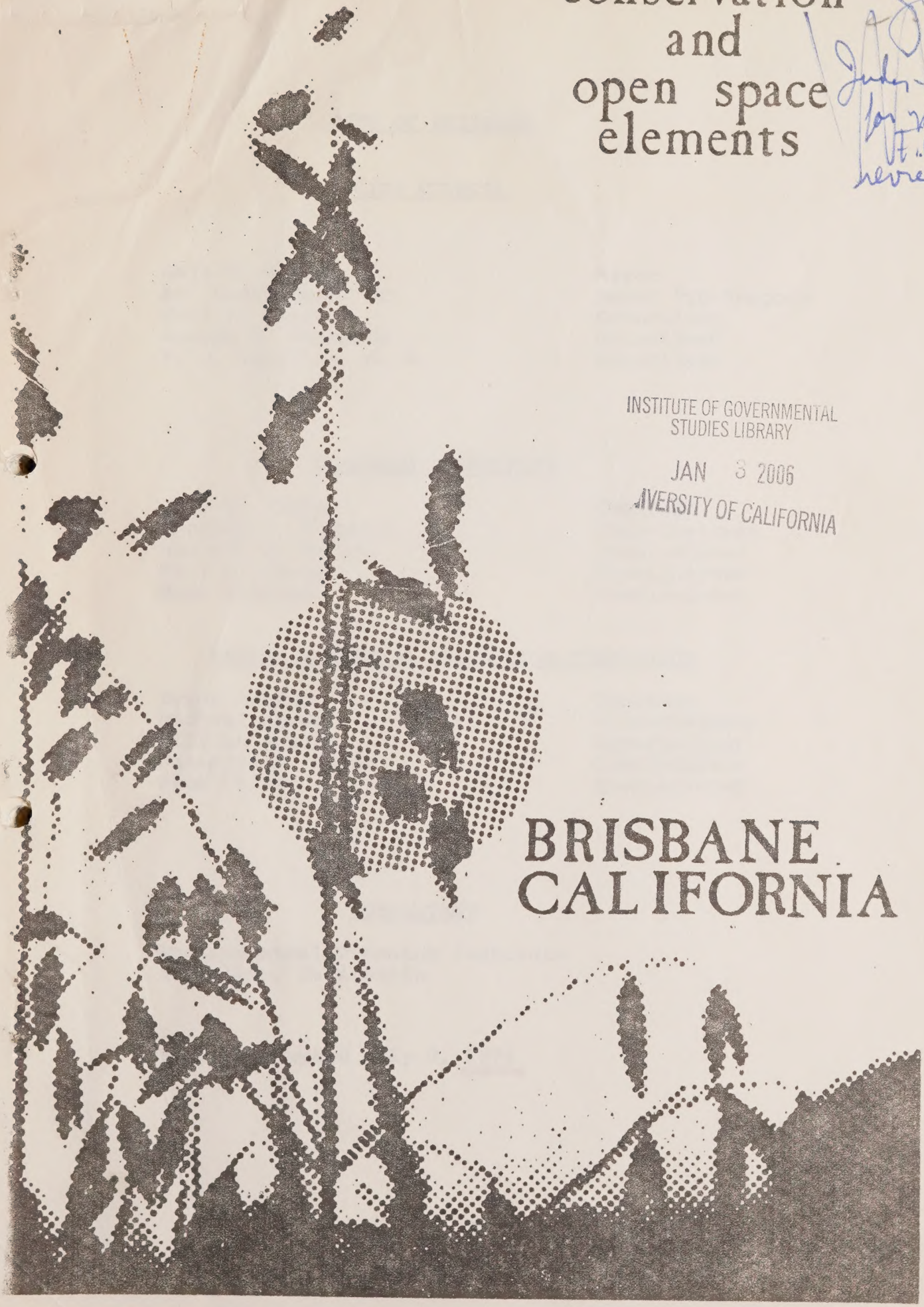

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Environmental Planning Institute
Sausalito, California

Element adopted July 8, 1974

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INTRODUCTION

The City of Brisbane (being located upon the northerly slope of San Bruno Mountain, south of the City of San Francisco and adjacent to the westerly shoreline of San Francisco Bay) has caused the study contained herein to be performed in accordance with legislation of the State of California. This document is to be considered the Conservation and Open Space Elements of the General Plan for the City of Brisbane.

These Elements are intended to be flexible, working tools to achieve the goals outlined later in this document. In addition the manner in which the Elements were developed is presented and reflects the basic assumptions behind the study. The Elements are detailed in a way that give clear guidance to the concerned local governing bodies, but allows the final decision as to exact and precise land uses to remain the decisions of the residents of the City.

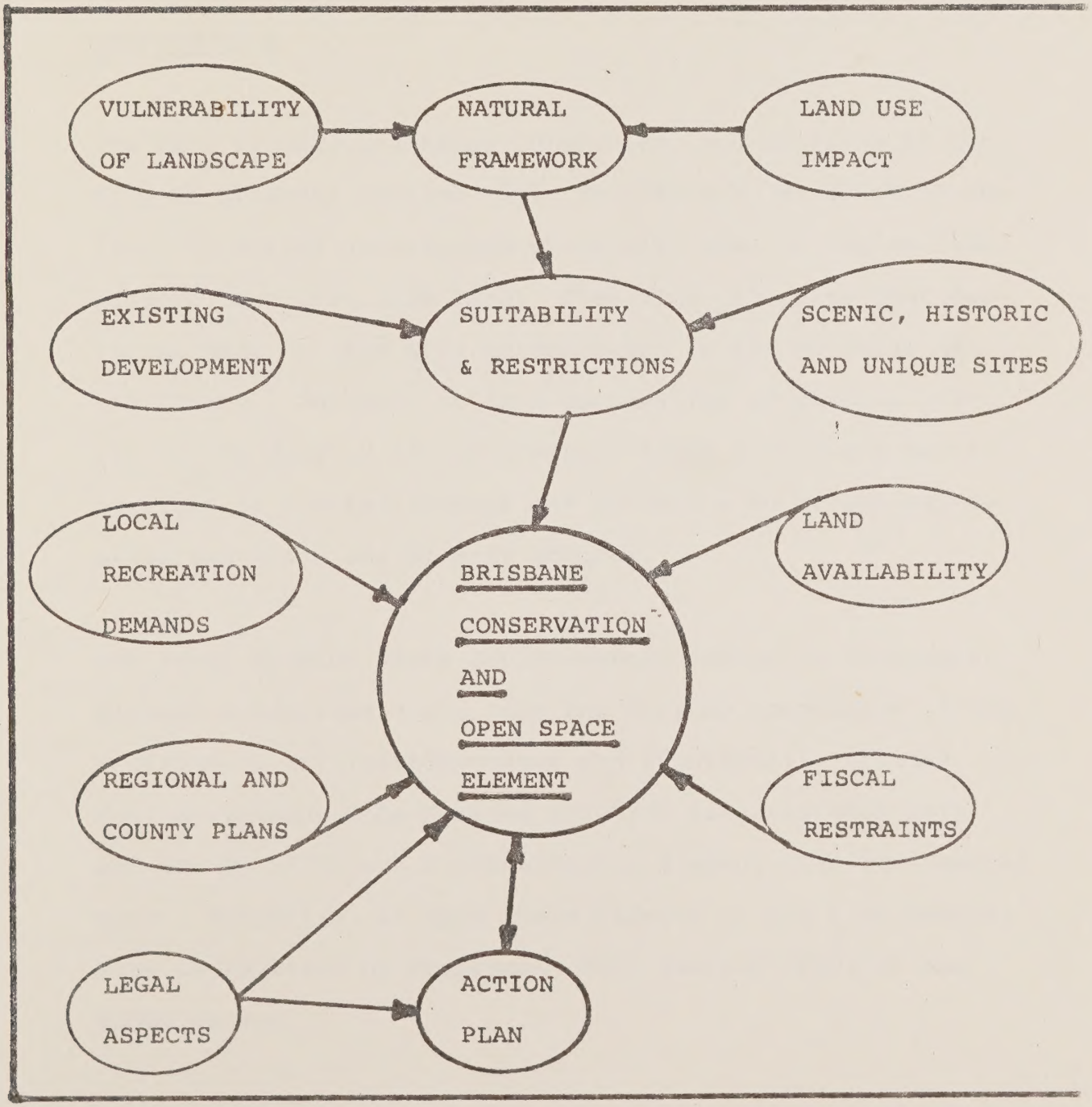
As with any plan, public and private cooperation will be needed to effect its implementation. The public sector deals with the acquisition of lands and provision of utilities necessary for the support of the activities taking place

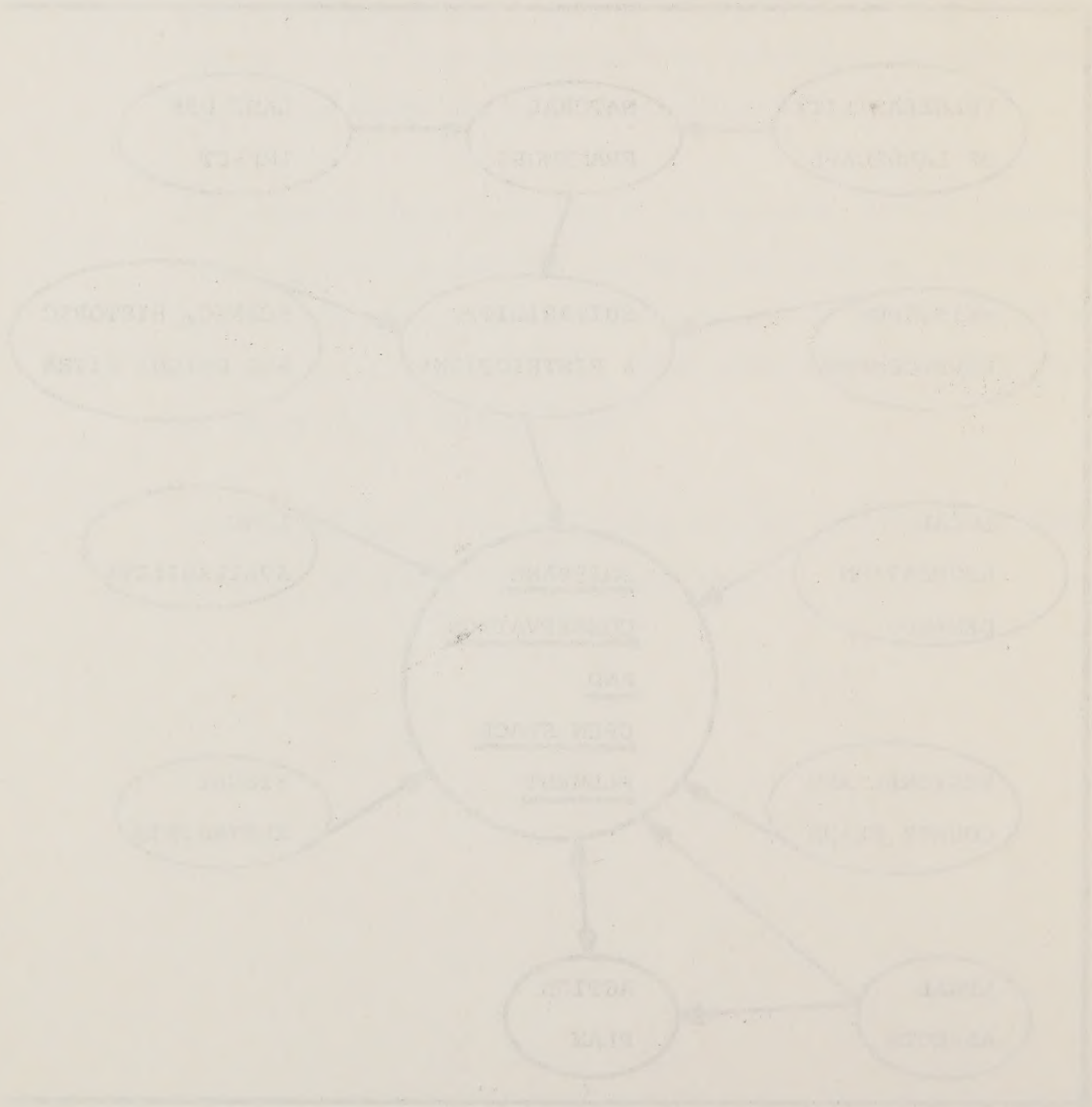
within the Open Space. The private sector deals with categories of land uses appropriate to landscape, existing development patterns and land vulnerability.

All proposed uses, both public and private, are in accordance with a land vulnerability analysis conducted for the area. Any development or recreational use should be located in accordance with this analysis. How something is done is just as important as what is done.

This Conservation and Open Space Element provides for flexibility, adaptibility and expandibility.

SCOPE OF THIS ELEMENT





CHAPTER ONE: ORIENTATION

INTRODUCTION

The City Council, Planning Commission, and citizens of the City of Brisbane realize their obligations, as users of the land, to future generations which will need to derive life support from that same land. They also recognize that decisions made by them will be reflected in the heritage of the future. Implicit in this recognition of responsibility is the duty to act in a manner which will avoid deterioration of the environment and to strive to offset any degradation which has already occured.

The newly adopted State Environmental Resources Management Element Guidelines state that the various components of the environment are interdependent and functionally related. Yet, Government Code Section 65302(d) requires each city and county to affect a Conservation Element into its General Plan. Meanwhile, an Open Space Element to the City General Plan is required by Government Code Section 65302(e) and 65560 et seq.

Due to the overlapping and natural interrelationships of

Conservation and Open Space Elements, a joint Conservation-Open Space Element has been prepared for the City of Brisbane. Guidelines prepared by the Council on Intergovernmental Relations sanction and encourage such consolidation of related plan elements. The Conservation and Open Space Elements are both resource-oriented, in that they are both concerned with preservation and managed uses of resources.

STATE LEGISLATIVE MANDATE

In addition to the previously discussed recognized responsibilities of the citizens of Brisbane to their own and future generations, the State has issued a mandate to all cities and counties to adopt, submit, and take action on a Conservation Element and an Open Space Element. There is a very definite reason for this mandate of the Legislature which is stated in Government Code Section 65562. This reason is "to assure that cities and counties recognize that open-space land is a limited and valuable resource which must be conserved wherever possible." The Legislature also states that it is in the public interest to discourage premature and unnecessary conversion of open space to urban uses, and to assure orderly growth and development of the State and preservation and conservation of its resources.

OPEN SPACE DEFINED

Open Space land is defined in Sec. 65560 as any parcel of land or water which is essentially unimproved and which is designated on an open space plan as open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and public health and safety.

PROGRAM OF ACTION A MUST

The Legislature in handing down its mandate for Conservation and Open Space Elements did not intend that documents and maps would be produced and filed away to be forgotten. These Elements must contain an action program for implementation and the Legislature is quite explicit in this matter. According to Sec. 65567, "No building permit may be issued, no subdivision map approved, and no open space zoning ordinance adopted, unless the proposed construction, subdivision or ordinance is consistent with the local open space plan."

GENERAL PLAN RELATION TO E.I.R.

The Council on Intergovernmental Relations has established

guidelines for the preparation of general plan elements which state that a general plan and its elements should be used in the review of Environmental Impact Reports (EIR). An EIR should be reviewed for consistency with adopted standards of the general plan and its elements. The fact that a specific plan may conform to a plan and its elements does not preclude the need for an EIR. The purposes of an EIR include conclusions of whether or not a development will have a significant impact on the environment, consideration of alternatives, proposed measures for reducing adverse impacts AND public disclosure .

DEFINITION OF ENVIRONMENT

The previous paragraph contains a discussion concerning Environmental Impact Reports. It would be advantageous to consider what an impact on "environment" is. To do this a clear understanding of the word "environment" is needed because most consider it as only ecology. However, Webster defines the word as, "whatever encompasses, ... the aggregate of all external and internal conditions affecting the existence, growth, and welfare of organisms."

An individual human being is an organism and a collection of these organisms into a specific area with mutual goals and objectives is sometimes called a city. Such is the City of Brisbane which, when considering development proposals or building permits, must consider the aggregate of all external and internal conditions affecting its existence, growth, and welfare. These conditions include, but are not limited to;

1) ecological factors such as water, air, and noise pollution
2) traffic, including pedestrian, equestrian, automotive, etc.
3) changes to the individuals taxes due to increased municipal services costs

SCOPE OF ELEMENT

Since this Conservation and Open Space Element concerns itself with some of the environmental aspects of the City of Brisbane, it must also concern itself with external as well as internal conditions affecting its existence. Conservation issues confronting not only Brisbane, but also unincorporated areas of San Mateo County and other urban

areas must include factors of human awareness, understanding, technological factors of natural resource and environmental management, as well as social responsibility and interaction. An example of social interaction is contained in "The Recreation And Open Space Element Of The Comprehensive Plan Of San Francisco" which can be cited as having established a precedent as regards a community making a statement, in its General Plan Elements, concerning lands outside its jurisdictional boundaries. The beforementioned document contains statements relative to San Bruno Mountain and the major concern of that City for the "entire ridge line".

The City of San Francisco believes that "because of the visual and recreational importance of San Bruno Mountain, City representatives should participate in ... planning efforts involving the mountain and should take an active role in seeing that a regional park is established there". The document goes even further to state that the City of San Francisco should be involved in any way possible in development planning for the mountain to ensure that the visual integrity of the ridge line continues to be preserved.

The urbanized area of the City of Brisbane, being nestled

into the northerly slope of the east ridge of San Bruno Mountain, has a much closer proximity to San Bruno Mountain and any development or other planning efforts relative to the mountain would logically have a greater impact on the residents of Brisbane and are, of course, of even greater concern to them.

Therefore, following an established precedent and with an effort to express the concern and desires of the residents of the City of Brisbane, this Conservation and Open Space Element of the General Plan includes an analysis and study of San Bruno Mountain as a whole as well as the territory within the jurisdictional boundaries of the City of Brisbane.

This Element constitutes a policies plan for the City. As such, it establishes overall guidelines and/or criteria for decision-making rather than prescribing precisely what activities should occur in every area. However, specific recommendations are incorporated for some areas. This has been accomplished in accordance with the mandate of the State Legislature as follows:

STATE REQUIREMENTS-OPEN SPACE ELEMENT:

1. Authority

Government Code Section 65302(e) and 65560 et seq. requires an open space element in all city and county general plans.

A. Section 65563 requires every city and county to prepare, adopt, and submit to the Secretary of the Resources Agency a local open space plan for the comprehensive and long-range preservation and conservation of open space within its jurisdiction.

B. Section 65562 ... that every city and county will prepare and carry out open space plans which, along with state and regional open-space plans, will accomplish the objectives of a comprehensive open-space program.

C. Section 65561 ... that discouraging premature and unnecessary conversion of open space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage noncontiguous development patterns which unnecessarily increase the costs of community services to community residents.

D. That the anticipated increase in the population of the State demands that cities ... make definite plans for the preservation of valuable open space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations as authorized.

2. Scope & Definitions

A. Open Space for the preservation of natural resources

1. areas ... preservation of plant and animal life
2. areas ... the ecologic and other scientific study purposes
3. rivers, streams, bays, estuaries, coastal beaches, lakeshores, banks of rivers and streams, watershed areas

B. Open Space for managed productions of resources

1. forest lands (timber)
2. rangeland
3. agricultural

4. commercial fisheries

5. major mineral deposits

C. Open Space ... outdoor recreation

1. outstanding scenic, historic and cultural value

2. areas particularly suited for park and recreation purposes

3. areas which serve as links between major recreation and open space reservations

   a. utility easements

   b. banks of rivers and streams

   c. trails

   d. scenic highway corridors

D. Open Space ... public health & safety

1. fault zones

2. unstable soil areas

3. flood plains

4. watersheds

5. high fire risks

6. water reservoirs

E. An additional category that may be considered is the designation of areas to control urban form and prevent inefficient patterns of development. Section 65561(b) speaks ... to require time-phased plans. Such plans will benefit from studies to evaluate the costs to the community of permitting scattered developments as opposed to timed development. Economic studies ... to determine the overall costs to communities of preserving open space versus permitting its development. (Viz. Palo Alto Foothills Environmental Design Study)

F. Open Space element may include

1. Analysis of open space areas
2. Open Space policies and objectives
3. Standards and criteria for preservation
4. Definition of local open space categories
5. Description in text and diagram of areas designated for open space and method of preservation
6. Action for implementation (Sec 65564)

3. Methodology

A. Inventory and analysis of open space and environmental data

B. Analysis of community needs for open space for:

1. recreation

2. health and safety

C. Analysis of urbanization and land needs for projected future urbanization

D. Definition of open space land use categories. (i.e.) hillsides, marshlands, coastline, stream corridors, etc.

E. Citizen input

F. Development of open space plan and policies

G. Designation and description of proposed areas to remain open; the basis for their designation, the timing of the designation, i.e. whether permanent or reserved for future development

H. Preparation of an action program for implementation

4. Relationship to Other Elements

5. Implementation

A. Approval of development based on consistency with

the open space plan. Section 65567 states:

"No building permit may be issued, no subdivision may be approved, and no open space zoning ordinance adopted, unless the proposed construction, subdivision or ordinance is consistent with the local open space plan."

B. Preparation and adoption of an "open space zoning ordinance"

C. Regulations:

1. zoning ordinances
2. subdivision ordinances with open space land dedications and other development conditions
3. density transfers and P.U.D.
4. special land management zones

D. Open Space reserves under the Williamson Act

E. Acquisition

F. Scenic Easements and the purchase of Development Rights

G. Controlled growth policies and regulations

STATE REQUIREMENTS-CONSERVATION ELEMENT

1. Authority - Gov't Code Sec. 65302(d)

2. That portion including waters shall be developed in coordination with any county-wide water agency and with all district and city water agencies which have developed, served, controlled or conserved water.

3. May also include:

   a) reclamation of land and waters
   b) flood control
   c) stream and water pollution controls
   d) regulation of land use in stream channels
   e) prevention, control and correction of soils, beaches and shores
   f) protection of watersheds
   g) location, quantity and quality of rock, sand and gravel resources

4. REQUIRES an appraisal of communities' natural resources and development of policy for their preservation or wise utilization

   a) Identification, evaluation and analysis of communities' natural resources

      1. Water Resources

         a. source and availability of water
         b. flood control

c. water pollution

d. control of erosion, drainage systems, protection of watersheds

2. vegetative resources

3. harbors and fisheries

4. wildlife

5. minerals

6. soils and soil erosion

B. Analysis of relationships between these resources; identification of areas of concern

C. Determination of Development Capacity of various land areas with aim of conserving natural resources, minimizing ecologic disruption directing development to lands where such impact will be negligible.

D. Standards and criteria for conservation and utilization of identified resources.

E. Program for implementation including priorities.

5. Methodology

A. Inventory, analysis and description (maps)

B. Formulation of goals, objectives, policies, priorities with special attention to unique, en-

dangered or critical resources

C. Formulation of criteria and standards for implementation

6. IMPLEMENTATION

A. Zoning: flood plain zoning, open space zoning

B. Subdivision controls, grading ordinances, hillside ordinances

C. Acquisition of significant natural areas

D. Capitol improvements for water quality control

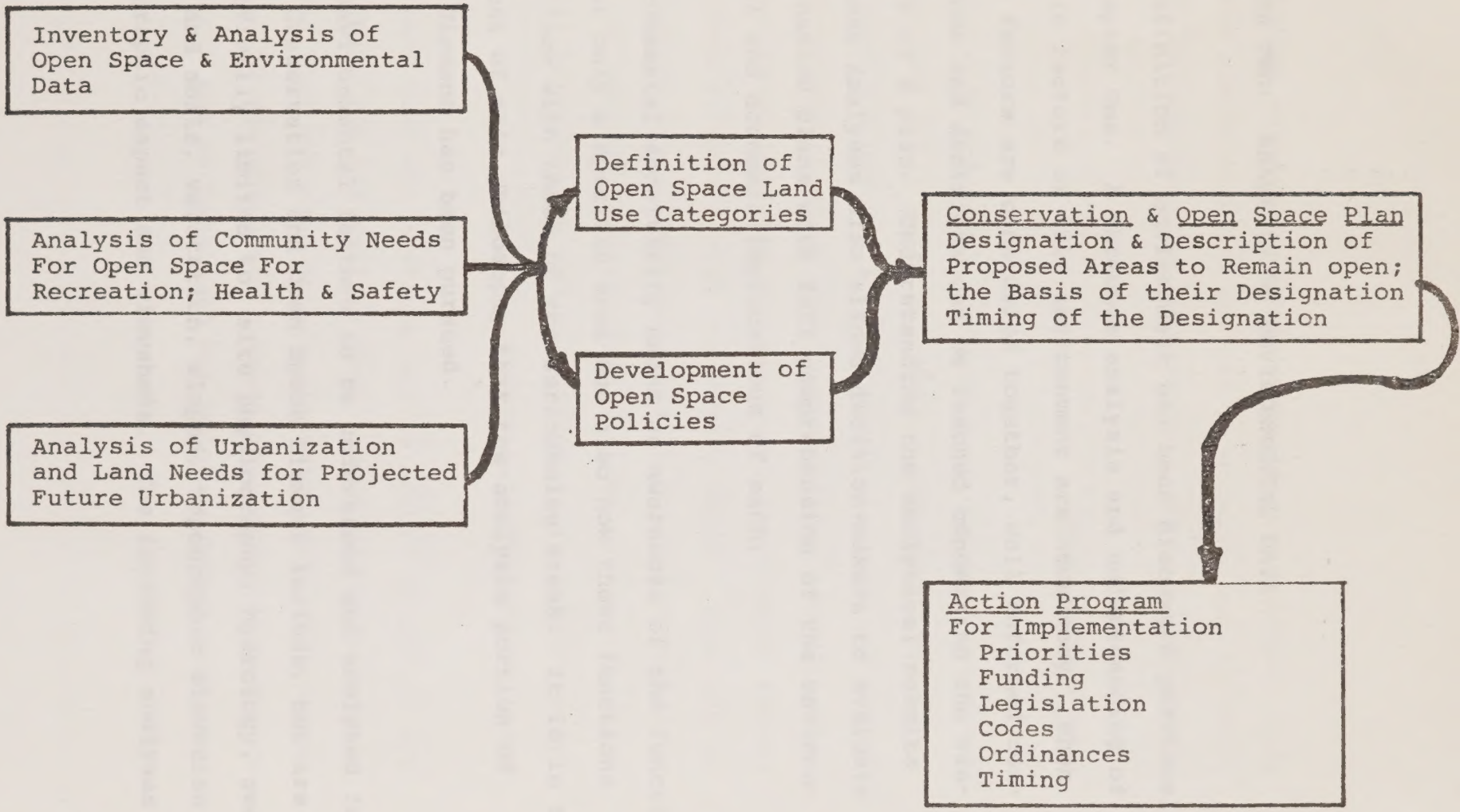
E. Regulations for mineral extraction, regulations to control water quality

F. Corrective Programs where action is needed to correct or reverse conditions causing environmental damage

1. Public programs
2. Private programs
3. Joint public-private
4. Actions to remedy erosion through
    a. special planting
    b. reforestation
    c. retention basins

G. Education and information

METHODOLOGY


Inventory & Analysis of Open Space & Environmental Data
Analysis of Community Needs For Open Space For Recreation; Health & Safety
Analysis of Urbanization and Land Needs for Projected Future Urbanization
Definition of Open Space Land Use Categories
Development of Open Space Policies
Conservation & Open Space Plan
Designation & Description of Proposed Areas to Remain open; the Basis of their Designation
Timing of the Designation
Action Program
For Implementation
Priorities
Funding
Legislation
Codes
Ordinances
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Timing of the Proposed Actions
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Ordinances
Timing

CHAPTER TWO: ANALYSIS OF ENVIRONMENTAL DATA

The definition of environment has been discussed previously in Chapter One. A thorough analysis and understanding of certain factors of this environment are necessary. When these factors are considered together, well informed conclusions and decisions can be reached concerning the viability of a plan. Understanding the analytical results of these analyses also allows decision-makers to evaluate alternative plans with full comprehension of the environmental and economic implications of each.

Environmental sensitivity means an awareness of the functions of not only a specific area but also how these functions interface with those of the surrounding areas. It is in the context of this philosophy that the analysis portion of this Element has been pursued.

The environmental factors to be understood and analyzed for this Conservation and Open Space Element include, but are not specifically limited to, site physiography, hydrology, geology and soils, vegetation, slopes, topographic elevation, topographic aspect and viewsheds. The following analyses

shall discuss each of these various elements individually, first in the overview of the San Bruno Mountain area, then direct focus on the incorporated city boundaries of Brisbane.

SITE PHYSIOGRAPHY

San Bruno Mountain as a whole is comprised of a varied and irregular topography. From its peak, 1,314 feet above sea level, the mountain descends in a northerly direction. It widens into a saddle-shaped area which gradually slopes toward Colma Creek Canyon on the west and Guadalupe Valley on the east. Colma Canyon has been virtually destroyed by the construction of the Guadalupe Canyon Parkway. This Parkway now acts as a physical barrier between the lower lying Crocker Hills portion of the mountain and its steeper, more rugged northerly slopes.

The southerly slopes of the mountain are very steep, rugged, characterized by short, deep ravines and are essentially inaccessible. The northerly slopes have the same basic characteristics although less steep. The Guadalupe Valley floor is presently being occupied and developed as the Crocker Industrial Park.

The land area within the incorporated limits of the City of Brisbane is separated into two distinct categories. The urbanized area, which contains the Central Business District and residences, nestles into the northerly slopes of the eastern tip of the mountain. This area contains approximately 200 acres beginning at the southerly edge of Guadalupe Valley and reaching approximately three/fourths of the way up the mountain. No development nor construction has, as yet, impaired the view of the ridgeline.

The balance of the land within jurisdictional boundaries of the City is flat with little or no slope. This flatland area can be considered physically separated from the built-up area by the Southern Pacific Railroad tracks and the Old Bayshore Highway.

A special note of interest is that the ridgeline of San Bruno Mountain defines the mountains form and serves as a major backdrop to the City of Brisbane as well as other surrounding communities.

TOPOGRAPHIC ELEVATION

The form of a site is critical to how it may be used. And,

topography is the most basic tool for understanding natural processes for planning. Ground slope is one of the more important phases of the topography. This will be discussed in the next section. A Topographic Elevation study was used as a part of the analyses of this Element for several purposes.

Irregularities of the earth's surface are known as landforms. Knowledge of their kinds and characteristics influences design decisions. For example, alluvial fans occur, particularly in mountainous areas, where a stream discharges onto a plain or valley floor. The result is the formation of a fan-shaped landform. The fan shape varies in proportion to the size of the watershed. Thus, the planner is able to identify watershed areas and determine their suitability for development or open space uses.

Another consideration is the visual form of the ground, which in its mechanical sense refers simply to visibility: what terrain can be seen from where. A contour map is analyzed into visibility diagrams. These are discussed in a later section of this chapter.

LAND VULNERABILITY ANALYSIS

At this point in the analysis process a determination was made to allow nature to determine what should take place in the determination of a Conservation and Open Space Element. The first step was an analysis of Brisbane's, and neighboring San Bruno Mountain's, landscape from the standpoint of its vulnerability to development. Potential recreational uses for the city and surrounding area were also analyzed in terms of their impact on the land. Results of the analyses were used in developing standards and proposing locations for Conservation and Open Space uses. The more intensive uses are appropriate for the less vulnerable areas. Conversely, the more vulnerable zones should logically be preserved undisturbed or used for low impact activities.

The next step was the inventorying of scenic, historic, or other unique features. Existing land uses and public facilities, such as roads, private ownerships, etc., were identified.

Six characteristics of the natural environment were selected, as stated previously. These were hydrology, geology and

soils, slope, aspect, vegetation, and viewshed. Data for each characteristic were collected and mapped.

To portray the relative importance of these six characteristics, a weighting system based on a maximum score of 100 points was established. Slope, which is one of the most critical natural characteristics in the area was allotted a possible 20 points; aspect, vegetation, and viewshed, 15 points each; geology and soils, 25 points; hydrology which is not as critical in the area was allotted 10 points. Each characteristic was then broken-down into sub-groups, with each being ranked according to vulnerability to development. In all cases, the highest scores represent those sub-groups of the given characteristic that are least suitable to development and most suitable for Conservation and Open Space.

SLOPE ANALYSIS

A slope analysis aids in recognizing areas on the land that lend themselves to building locations, roads, play areas, etc. It may also show if construction is feasible. A parking lot, for example, should have a grade of under 5%.

If there is no land available which meets this requirement, regrading will be necessary. The cost of grading may determine if the development of a site is feasible.

Also, a consideration of slope or the steepness of the land is reflected to some degree in each of the other land characteristics analyzed herein. The degree of soil erodability is also a function of the degree of slope. The grading mentioned in the preceeding paragraph could also have an effect on erosion.

The slopes were grouped into five categories for the purpose of this analysis. These meaningful slope break-downs, without other enviornmental consideration, include the following:

0-10% considered level; suitable for recreation, golf, housing, etc.

11-20% housing with considerable grading and reshaping of land.

21-30% costly range for housing, excessive grading required;

31-40% very costly to prohibitive range for housing; massive grading required; possible retaining walls

over 40% prohibitive for housing and roads

The subgrouping for the Land Vulnerability Analysis was scheduled as follows:

Slope Subgroup	Rank	
0 - 10%	5	least vulnerable
11 - 20%	13	
21 - 30%	17	
31 - 40%	19	
over 40%	20	most vulnerable

TOPOGRAPHIC ASPECT

Aspect refers to the orientation of the land. It is important because the amount of rainfall and solar energy received vary considerably with changes in aspect. For example, up to twice as much runoff will occur on a north facing slope as opposed to a south facing slope due to greater rainfall on the north slope and greater evaporation on the south. The Aspect Map is a good index of the sun intensity of the site and the relative evapotranspiration rate of the slope faces.

Ridges and hilltops (hot spots), which are essentially flat, do not affect runoff relative to the surrounding slopes and

are already so hot and dry that development there would cause the least relative impact on the surrounding area. Likewise, development of the flat bottom lands will cause less runoff than on slopes due to a greater ability to retain moisture.

Since development tends to dry out surrounding areas as vegetation is removed, less drying out would occur and development more suitable on slopes that receive less amounts of solar energy and greater amounts of rainfall. These were ranked from north to south according to the amounts of solar energy they receive.

Subgroup	Rank	
Hot spot	3	least vulnerable
Bottom land	6	
North slope	6	
East slope	9	
West slope	12	
South slope	15	most vulnerable

VEGETATION

The San Bruno Mountain Area has never had an extensive natural forest or groves. The only indigenous trees include

Buckeye, Live Oak, and Arroyo Willow. Introduced trees include Eucalyptus and Monterey Cypress. A variety of 542 other types of plants have been identified within the area. Of these, 384 are native with the other 158 types having been introduced. Historically, the land was heavily grazed. This use and summer grass fires have played a major role in modifying the environment.

However, there are five rare species of vegetation within the area. The communities in which they exist and thrive have been precisely located and have been indicated on the Vegetation Map. Their identification and location are:

1. Bearberry (arctostaphylos uva-ursi-"minature") Located just below the summit of Kamchatka Point and is the only known locality of this rare form of Manzanita.
2. Pacific Manzanita (arctostaphylos Pacifica). This species is known only on San Bruno Mountain where it occurs on rocky outcroppings close to Ridge Road about 300 yards southeast of the summit parking lot.
3. Montara Manzanita (arctostaphylos Montaraensis). This species occurs approximately 50 yards north of and downhill from Pacific Manzanita. The only

other known location of this species is on Peak Mountain in the Montara Range which is 15 miles south.

4. False Lilly-of-the-Valley (maianthemum dilatatum). This is one of the rarest plants on San Bruno Mountain. It is located at the base of the rock at Kamchatka Point where it reaches its southern most distributional range in San Mateo County.

5. Huckleberry (vaccinium arbuscula). This species is located at the same rock as the False Lilly-of-the-Valley. It is unknown anywhere in the Coastal Ranges since it is usually associated with Redwood Communities.

A special note is made here that the San Mateo County Department of Parks and Recreation has proposed that the above rare species are to be propogated and expanded. This same organization has proposed a certain plan to plant trees in clusters on the mountain. However, no plantings will be done which will change the profile of the ridgeline, since it defines the dramatic edge between the land and sky.

In general, as vegetation tends toward a climax state in its

natural succession, its ability to retain soil and absorb surface runoff will increase. The topsoil of climax vegetation is of such high quality that it acts as a sponge for the absorption of surface water. Over an area with mixed vegetation, development on lands where high runoff and erosion already exist will produce the least impact. This essentially means that barren land should be developed where possible and forested areas should be protected.

It is also desirable to protect climax vegetation because, if cleared, it will take much longer to return through natural succession. Any alteration of this relatively moist climax growth will also have a drying out effect on the land. Forested lands are prime oxygen producers which make them one of our most valuable resources to be conserved, especially in this era of mass urbanization and air pollution.

The vegetation communities on San Bruno and within the boundaries of the City of Brisbane have been combined into five basic categories, them mapped and ranked as follows:

Subgroup	Rank
Barren land	2
Grass Lands	6

Coastal scrubs	10
Existing trees	13
Rare Plant Communities	15

HYDROLOGY

Water, along with oxygen, are the main supporters of life on earth. Unlike other environmental necessities, it is the least substitutable. All living things depend on it for life and must have access to it. Its kinetic energy can erode and shape the land.

It is very important in a measure of land vulnerability to understand the drainage patterns which influence the amount and makeup of surface runoff. In general, surface water originating at a greater distance from a river or water body and flowing through several orders of streams before reaching that body of water will have more opportunity for dilution of solids and assimilation of organic wastes. In addition, the amount of peak runoff will be less due to more surface absorption.

The quality of ground water in the San Bruno area is considered adequate for domestic use when mixed with San

Francisco water. San Bruno water is characterized as very hard and is high in total dissolved solids. There has been an extreme overdraft (100%) in the San Bruno Area and the possibility of saline intrusion is very real.

Subgrouping and ranking of hydrologic features within this study area consists of first order basins (smallest permanently flowing stream) and interbasins (areas which discharge runoff directly into the lagoon. Because these small basins have little stream flow capacity, there is less chance for sediment to be diluted and for organic wastes to be assimilated. Steep slopes and increasing urbanization will of course compound the problem. Therefore, the interbasins and first order basins are substantially less desirable to develop than the second and third order basins. Basins were mapped and ranked according to the effect development within or near them would have on water quality.

Since the City of Brisbane has no local water supply but purchases its water from the San Francisco Water Department, the hydrology aspect has been rated lower than normal in the overall Land Vulnerability. It has not been discounted altogether because of some reported flooding within the city and its environs. Also, some of the water courses will be

designated for open space linkages and recreation areas.

Subgroup	Rank
Third Order Basin	0
Second Order Basin	3
First Order Basin	7
Interbasin	10

GEOLOGY AND SOILS

There are no known major mineral deposits to be conserved within the City of Brisbane.

The consideration of Geology and Soils as a tool for the Land Vulnerability Analysis is for the purpose of locating soil areas which are susceptible to erodibility and slides. These have been mapped along with fault lines as designated on a Preliminary Geologic Map of the San Francisco South Quadrangle publised by the U.S.G.S.

Subgroup	Rank
Low susceptibility soil	5
Moderate " "	10
Probable Fault	15
High Susceptibility Soil	20
Known Fault	25

Fault zones are important since recent State laws prohibit any structures within 50 feet of an active trace. Additionally, no structures are allowed on active faults and these areas will be used as either open space or linkages.

Soils which are least susceptible to errosion have the least land vulnerability and are therefore better suited for development.

VIEWSHED

The subject of viewshed is probably and will probably be one of the most controversial segments of this Land Vulnerability Analysis. However, San Mateo County has adopted a proceedure, for the determination of scenic areas, which is similar to that used by the United States Forest Service. This Element incorporates that same technique as outlined:

1) The visual limits or viewshed of the proposed Scenic Area is recorded on a map. (See Exhibit 2 - 1)
2) The results of an on-site inspection of the proposed Scenic Area's landscape characteristics and features are mapped by use of techniques illustrated on Exhibits 2 - 1 and 2 - 2 and a photographic record is made of the site.

TOPOGRAPHIC RECORDING OF VIEWSHEDS AND SCENIC AREAS

NORTH

0 ¼ 1 2 3 MILES

SCALE

LEGEND:

(1) MILEAGE MARKER

FOREGROUND BOUNDARY (¼ MI. FROM ROAD)

MIDDLEGROUND BOUNDARY (3 MI. FROM ROAD)

BOUNDARY OF VIEWSHED

AREAS:

FOREGROUND (WITHIN ¼ MILE OF ROAD, 6150 AC.

MIDDLEGROUND (BETWEEN ¼ & 3 MILES FROM ROAD) 22540 AC.

BACKGROUND (OVER 3 MILES FROM ROAD) 6520 AC.

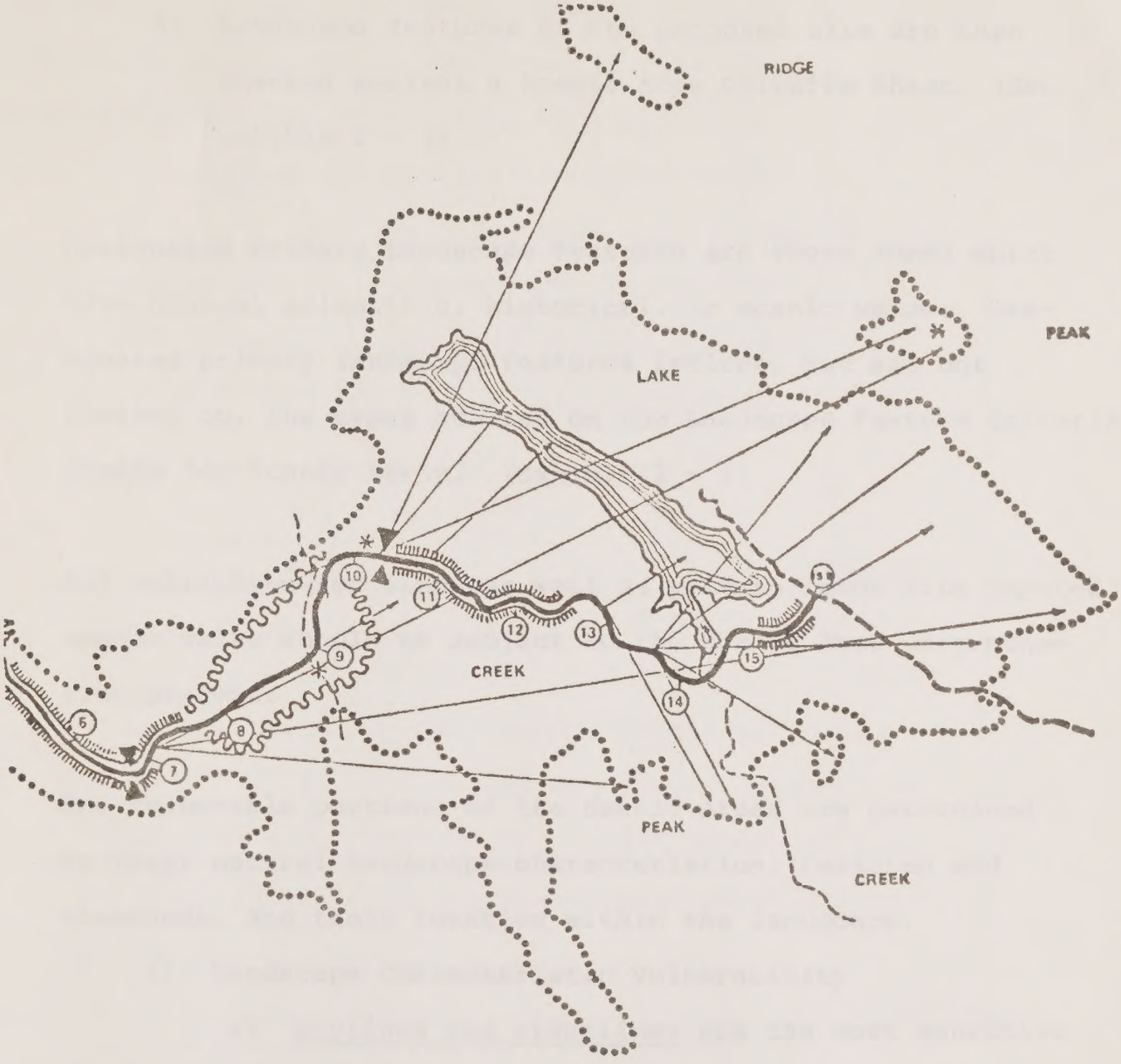
WATER AREAS 3320 AC.

TOTAL AREA, 37,530 ACRES

BASE MAP SOURCE: USGS, 7½ MINUTE SERIES

EXHIBIT 2-1

LANDSCAPE MAPPING OF VIEWSHEDS AND SCENIC AREAS



LEGEND:

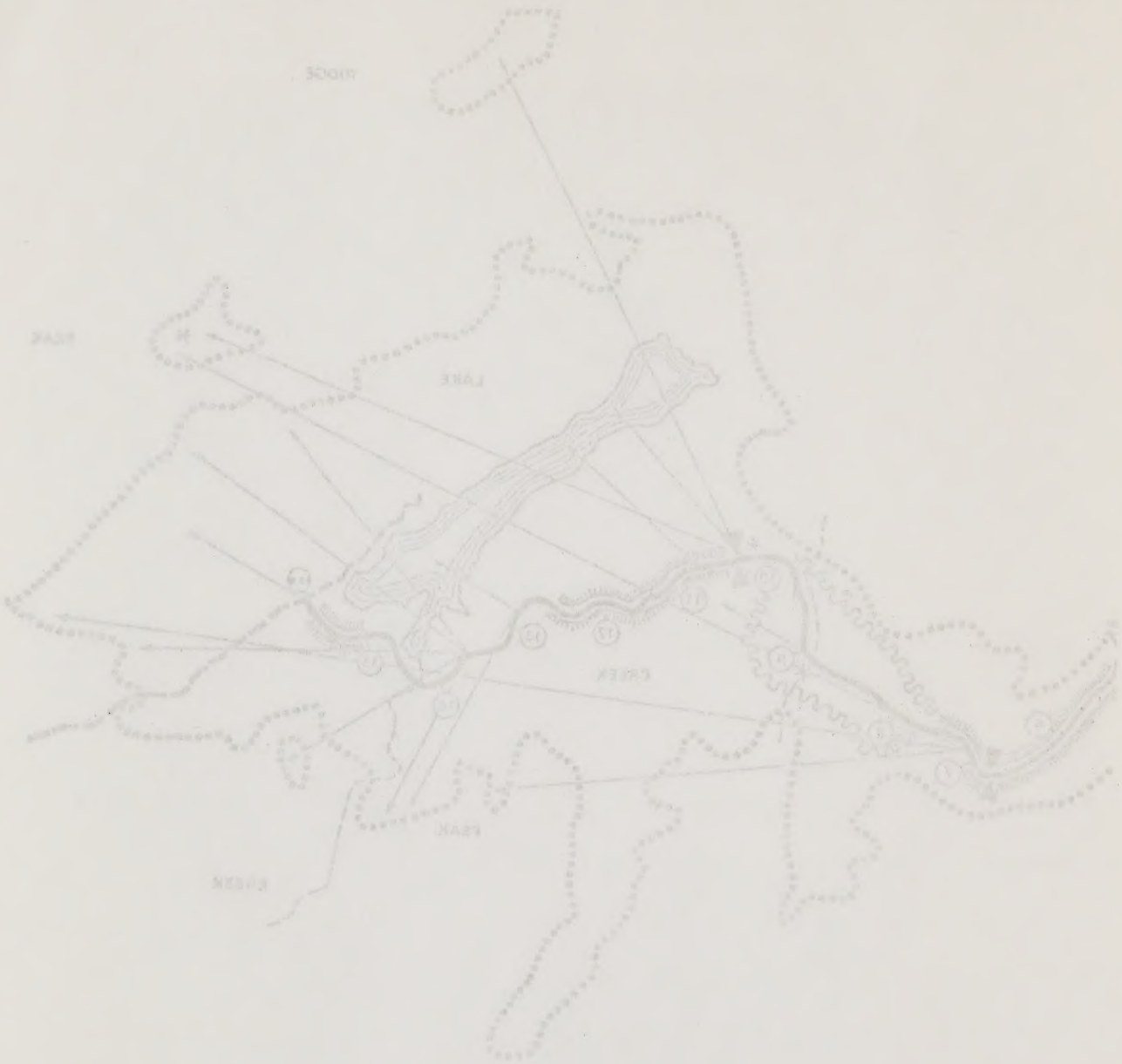
- MILEAGE MARKS
- ROAD SUMMIT
- LINE OF SIGHT
- FEATURE (DOMINATED) LANDSCAPE
- ENCLOSED LANDSCA E (SPACE)
- FOCAL LANDSCAPE; CONIFER CORRIDOR
- BOUNDARY OF VIEW SHED

NORTH

0 ½ 1 2 3 MILES

SCALE

EXHIBIT 2-2



3) Landscape features of the proposed site are then checked against a Scenic Area Criteria Sheet. (See Exhibit 2 - 3)

Designated Primary Landscape Features are those forms which have unusual scientific, historical, or scenic value. Designated primary landscape features include, but are not limited to, the types starred on the Landscape Feature Criteria Sheets for Scenic Areas. (Exhibit 2 - 3)

All publicly-owned lands as well as private lands with imputed scenic value should be subject to the Scenic Area determination process.

The vulnerable portions of the Scenic Areas are determined by their natural landscape characteristics, features and viewsheds, and their location within the landscape.

1) Landscape Characteristic Vulnerability

a) Skylines and ridgelines are the most sensitive because they display any alteration to the natural environment over a wide area.

b) Land and Water Edges: Flat, low-level vegetation encountered at the junction of land forms and water does not provide any camouflage for man-made alterations.

c) Rock, soil and vegetative edges which provide contrast in our views of the land. Extensive penetration of development into edges detracts from these natural contrast points.

2) Unique Feature Vulnerability

a) Structures located on, in or near a unique scenic form or area can be visually obvious, destructive and affect the viewshed in other ways.

SUBGROUP	RANK
Three checks on S.A.D. list	10
Five " " " "	11
Starred items on checklist	12
Rock, Soil, Vegetative Edges	13
Land and Water Edges	14
Ridgelines and Skylines	15

VULNERABILITY

Once the natural characteristics have been mapped and ranked, they are superimposed on one another. This provides a composite numerical score, showing relative vulnerability of the

CRITERIA FOR SCENIC AREA DETERMINATION

CATEGORY		CRITERIA (Landscape Features)	PRESENCE ON SITE
Topographic forms	*1)	Vertical Exposed Rock Faces - Usually sparse vegetation, slopes from 60 to 70%.	
	2)	Steep noticeable 50 to 60% slopes, significant land forms, typical, large vegetation areas.	
	3)	Strong slopes 30 to 50%± and alluvial areas in contrast with strong slopes.	
Scientific forms	*1)	Areas of scientific/geologic interest (may not be apparent to untrained observer).	
Vegetative forms	*1)	Unique plants or plant communities, (for example, large plants, unusually large groups of plants, heritage trees).	
	2)	Large grasslands/brush open spaces.	
	3)	Uncommon genus or species for area.	
Water			
Streams	*1)	Permanent flow.	
	2)	Intermittent flow.	
Waterfalls	*1)	Waterfall over 3'.	
	2)	White water areas.	
Spring/ Percolation Areas	*1)	Significant, year round flow of water.	
	2)	Intermittent flow of water.	
Lakes/ Reservoirs	*1)	Natural lakes or reservoirs in existence for 75+ years, reservoirs over 5 acres.	
	2)	Reservoir of less than 75 years and minimum of 5 acres.	
	3)	Lakes and reservoirs less than 5 acres.	
Ocean/ Beach	*1)	All ocean beach areas within ¼ mile of the mean high-water line or State Highway #1, whichever is less.	
	*2)	Unique upland areas providing primary viewsheds from public beaches.	
Structures	*1)	State and/or County designated historic sites.	
	2)	Singular or multiple structures of architectural interest.	
	3)	Engineering constructs.	
	4)	Other archaeological, historic, or cultural sites.	

*These features, if present, are to be designated "Primary Landscape Features".

EXHIBIT 2-3

landscape to land development. This compostie of final scores is then divided into six categories of vulnerability ranging from slight to severe. Thus, depicting the relative suitability of the land for development and providing the basic framework from which this Conservation and Open Space Element plan was developed.

CATEGORY	VULNERABILITY DESIGNATION	COMPOSITE POINT RANGE
A	slight	12 - 25
B		26 - 37
C		38 - 49
D		50 - 59
E		60 - 79
F	severe	80 - 100

LAND USE IMPACT ANALYSIS

The dual objective of this Analysis of Environmental Data is to determine the relative impact of a range of conventional land uses on any given piece of land in its natural (or existing use) state, and then to use this data in conjunction with the Land Vulnerability Analysis to determine suitable uses for the lands designated within this Conservation and Open Space Element.

Each land use imposes a different combination of demands upon

a site. For the purpose of this analysis nine specific indices of impact have been considered and evaluated for each land use of the Open Space designated later in this Element. These nine indices are divided into two broad categories; (1) Site Alteration, which is concerned with the impact resulting from physical alterations of the site and (2) Human Intrusion, which deals with the impact caused by human use over a period of time. The nine indices and their interrelationships can best be expressed graphically, as shown in Exhibit 2 - 4.

A brief explanation of these indices is as follows:

1) Slope Requirement - An indication of the cut and fill required to accommodate a specific use to a particular site.
2) Percentage of Clearance - The amount of natural vegetation clearance for a specific site.
3) Utility Requirement - The utility system required to serve a particular land use.
4) Building Area Coverage - The percentage of land that is occupied by structures for a given use.
5) Paved Area Requirement - The percentage of land that is paved with some impervious material (e.g., asphalt)

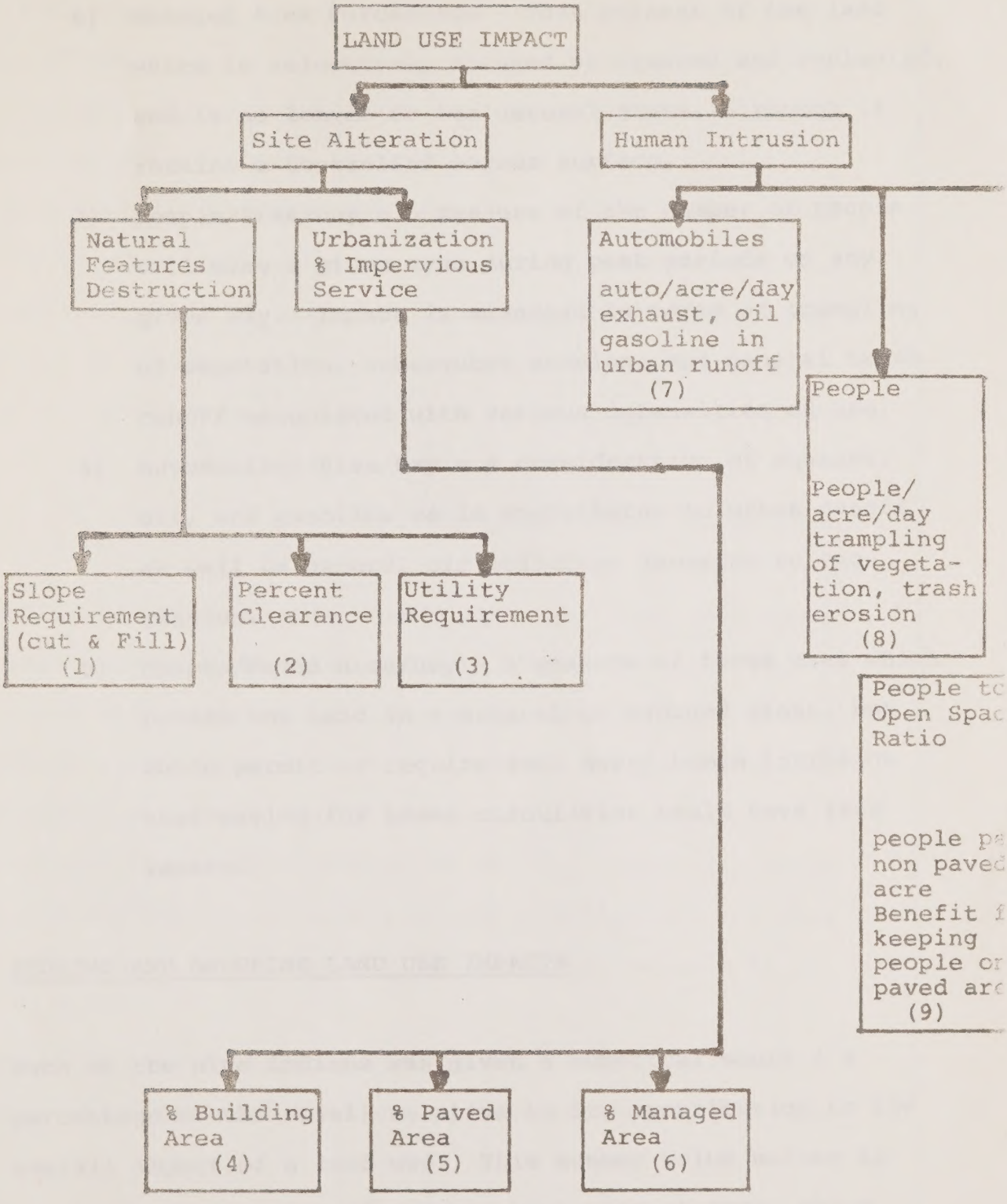
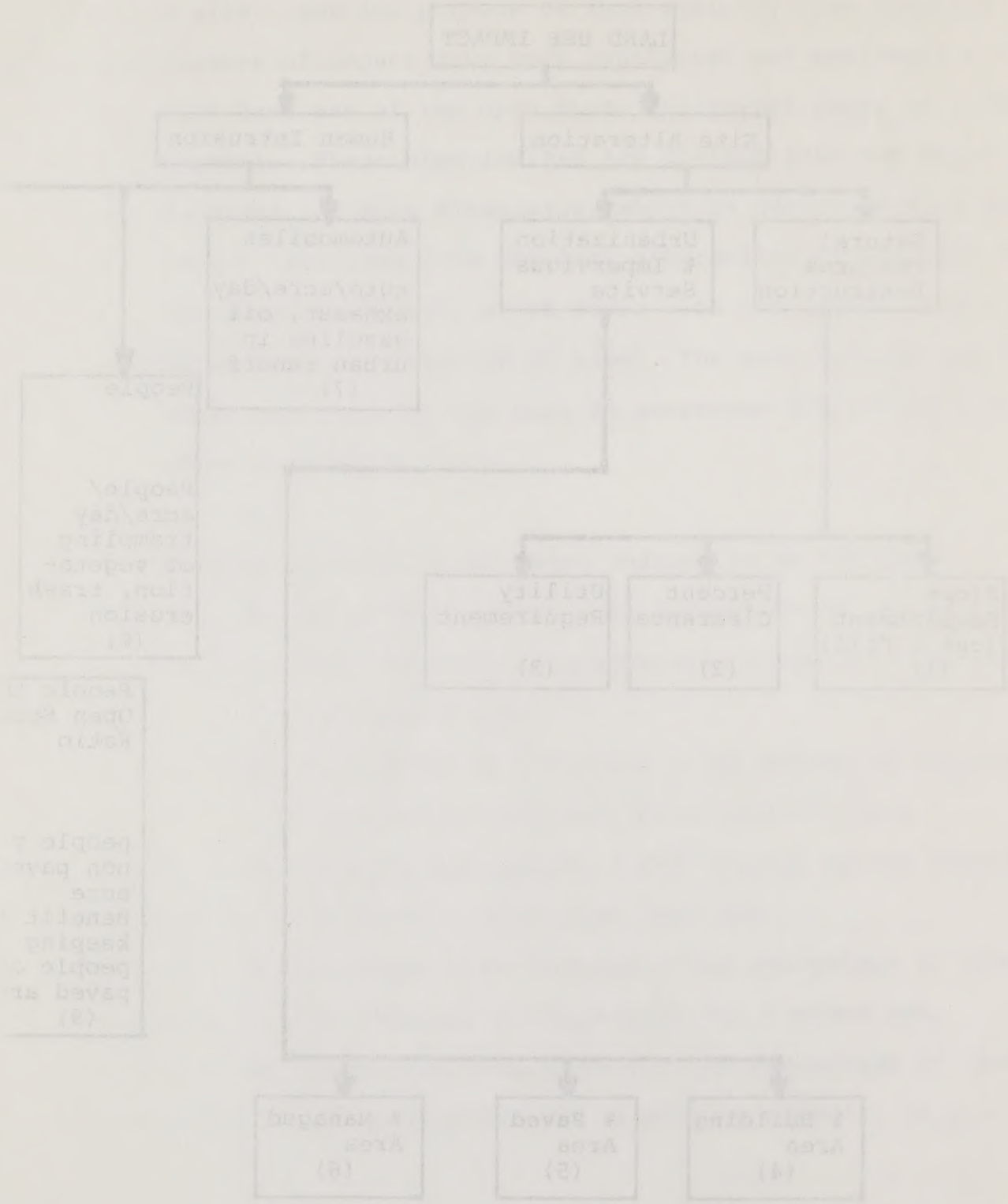

LAND USE IMPACT
Site Alteration
Human Intrusion
Natural Features Destruction
Urbanization % Impervious Service
Automobiles
auto/acre/day exhaust, oil gasoline in urban runoff
(7)
People
People/ acre/day trampling of vegeta- tion, trash erosion
(8)
People to Open Spac Ratio
people pe non paved acre
Benefit f keeping people or paved are
(9)
Slope Requirement (cut & Fill)
(1)
Percent Clearance
(2)
Utility Requirement
(3)
% Building Area
(4)
% Paved Area
(5)
% Managed Area
(6)

EXHIBIT 2 - 4



6) Managed Area Percentage - That percent of the land which is selectively thinned or cleared and replanted, and is no longer in its natural state, although it retains a controlled porous surface.

7) People/Area/Day - A measure of the number of people utilizing a given area during peak periods on any given day. Impact is measured in terms of trampling of vegetation, subsequent erosion, and general trash runoff associated with various intensities of use.

8) Automobiles/Area/Day - A consideration of exhaust, oil, and gasoline as it contributes to urban runoff as well as general air pollution damaging to vegetation.

9) People/Paved Area/Day - A measure of those uses which retain the land in a natural or managed state, but which permit or require such heavy human intrusion that paving for human circulation would have less impact.

SCORING AND GROUPING LAND USE IMPACTS

Each of the nine indices was given a numerical score (a percentage of the total) relative to its contribution to the overall impact of a land use. This number value serves as a maximum for a range of scores, beginning at zero, which

indicates the possible levels of impact a specific use may have. For example, the percentage clearance index is considered to be 10 percent of the total possible impact a particular use can have on a site; thus it has a maximum score of 10; 50 percent clearance scores 5 in the impact category. This was done for all nine indices for each specific land use analyzed. Data was gathered from various sources, books, and other agencies and is based on typical design and construction standards. (See Exhibit 2 - 5)

LAND USE IMPACT ANALYSIS RESULTS

Recreation land uses were found to be distributed rather evenly over the complete impact range with several uses scoring high in overall impact. While recreation has a rather low impact on the land with regard to site alteration, it frequently has a relatively severe impact in terms of human intrusion. It can be concluded that many recreation uses are not suitable when preservation of the natural quality of the land is the primary objective.

The following list reflects the impacts of various recreational uses and correlates them to the Land Vulnerability Analysis:

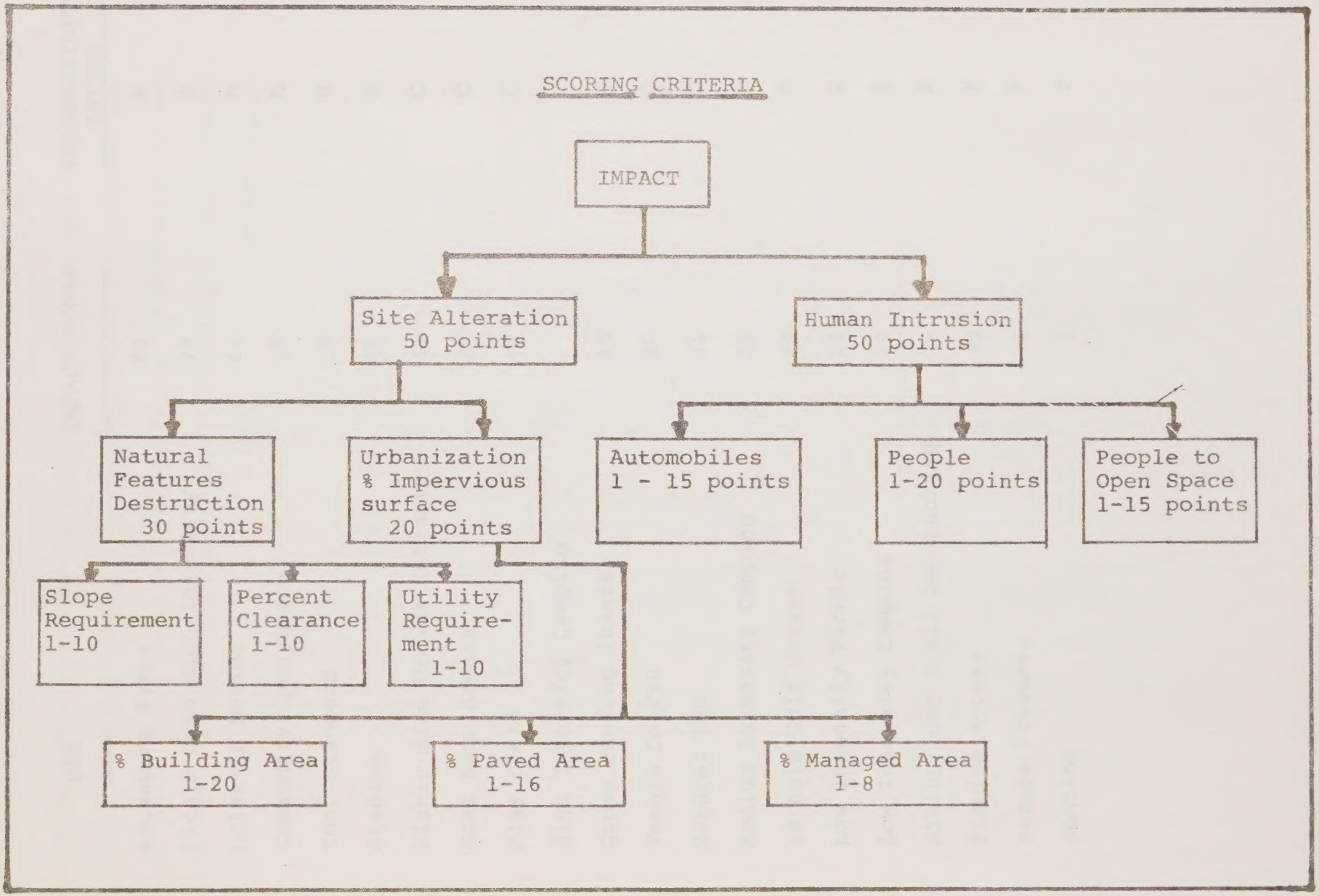
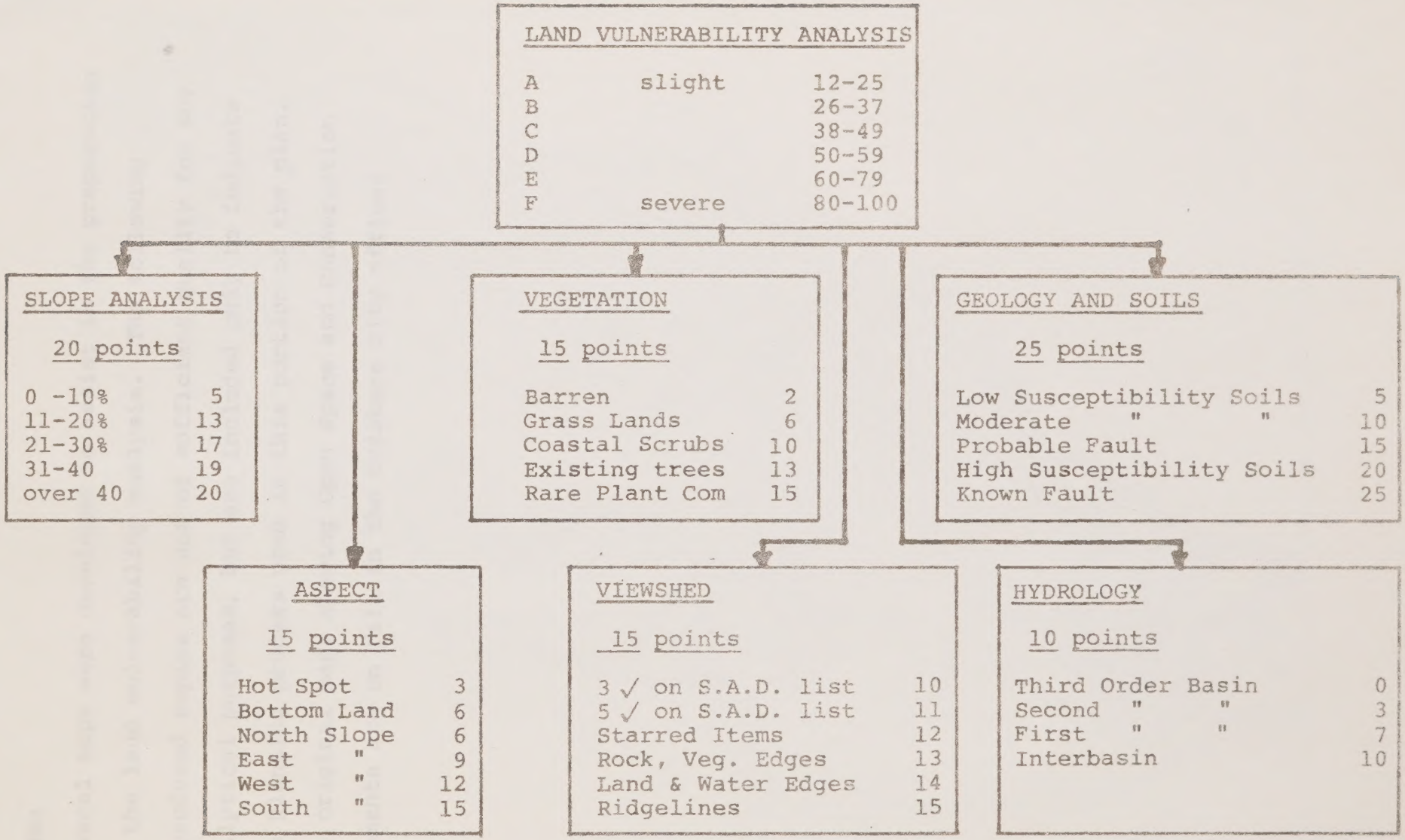

SCORING CRITERIA
IMPACT
Site Alteration
50 points
Human Intrusion
50 points
Natural
Features
Destruction
30 points
Urbanization
% Impervious
surface
20 points
Automobiles
1 - 15 points
People
1-20 points
People to
Open Space
1-15 points
Slope
Requirement
1-10
Percent
Clearance
1-10
Utility
Require-
ment
1-10
% Building Area
1-20
% Paved Area
1-16
% Managed Area
1-8

EXHIBIT 2 - 5

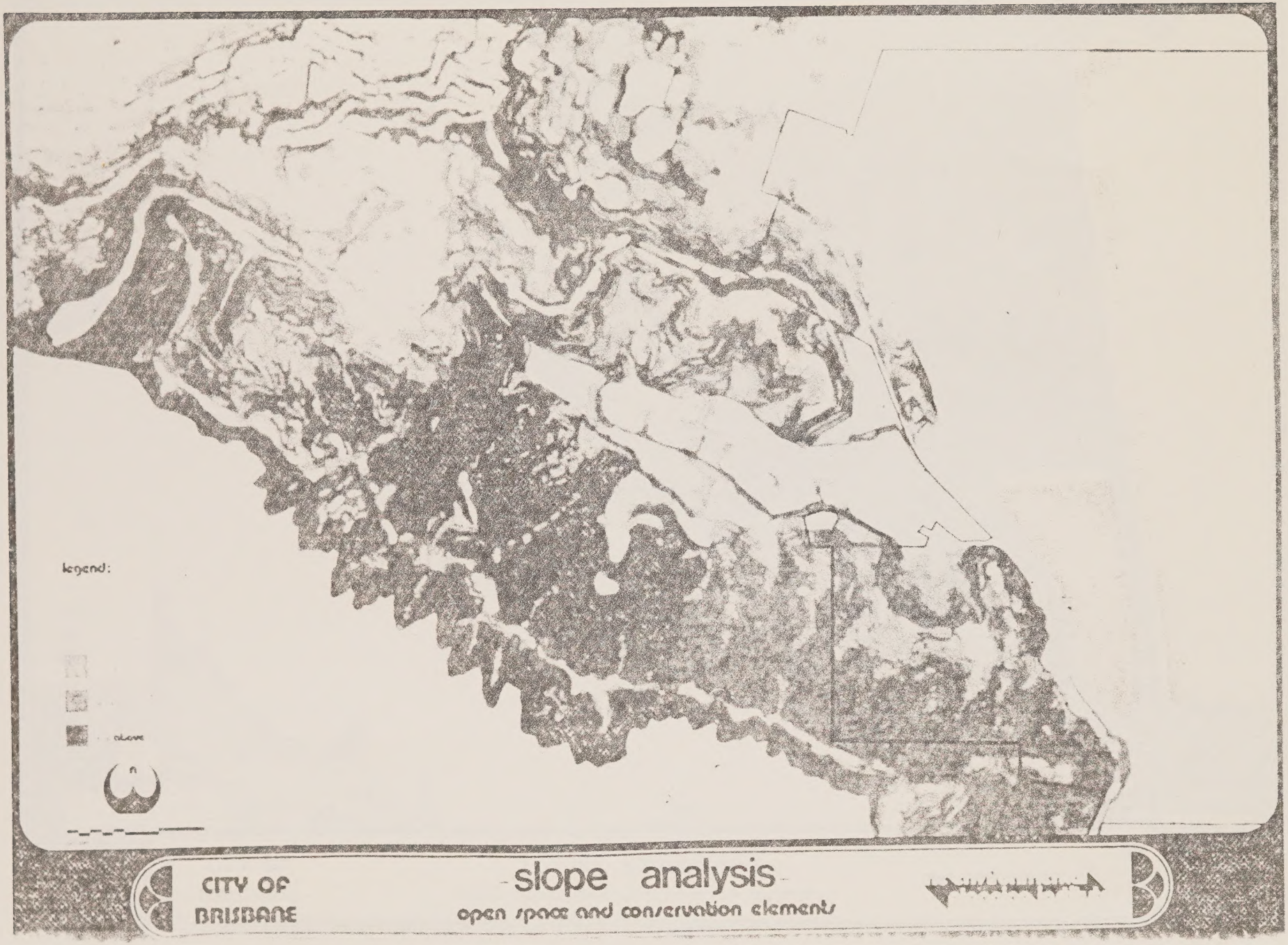
USE	IMPACT SCORE	VULNERABILITY RATING
Amusement Parks	85	A
Picnic Area High Intensity	73	A
Drive-In Movies	66	B
Community Open Space	65	B
Zoo, standard	59	B
Stadium	52	B
Picnic Area Medium Intensity	49	C
Boat Ramp Access	47	C
Play Field	42	C
High Intensity Camping		
Group camping (tents)	40	C
Tennis Courts	36	C
Natural Zoo	31	D
Medium Intensity Camping	29	D
18 hole Golf Course	28	D
Low Intensity Picnic	24	E
Low Intensity Camping	20	E
Hiking/long trail backpacking	12	F
Fishing Access	10	F
Nature Preserve	2	F
Hunting	1	F

The Land Vulnerability Analysis was used to determine areas for Conservation and Open Space. The Land Use Impact Analysis was interfaced with the Vulnerability Analysis as a basis of determining locations of recreation items relative to community needs.


LAND VULNERABILITY ANALYSIS
A slight 12-25
B 26-37
C 38-49
D 50-59
E 60-79
F severe 80-100
SLOPE ANALYSIS
20 points
0 -10% 5
11-20% 13
21-30% 17
31-40 19
over 40 20
VEGETATION
15 points
Barren 2
Grass Lands 6
Coastal Scrubs 10
Existing trees 13
Rare Plant Com 15
GEOLOGY AND SOILS
25 points
Low Susceptibility Soils 5
Moderate " " 10
Probable Fault 15
High Susceptibility Soils 20
Known Fault 25
ASPECT
15 points
Hot Spot 3
Bottom Land 6
North Slope 6
East " 9
West " 12
South " 15
VIEWSHED
15 points
3 ✓ on S.A.D. list 10
5 ✓ on S.A.D. list 11
Starred Items 12
Rock, Veg. Edges 13
Land & Water Edges 14
Ridgelines 15
HYDROLOGY
10 points
Third Order Basin 0
Second " " 3
First " " 7
Interbasin 10

NOTE:

Several maps were developed to assist in the preparation of the land vulnerability analysis. The following reproduced copies are not of sufficient quality for any analytical purposes, but are included only to indicate the planning process used in this portion of the plan. The original maps showing Open Space and Conservation Elements are on file in the Brisbane City offices.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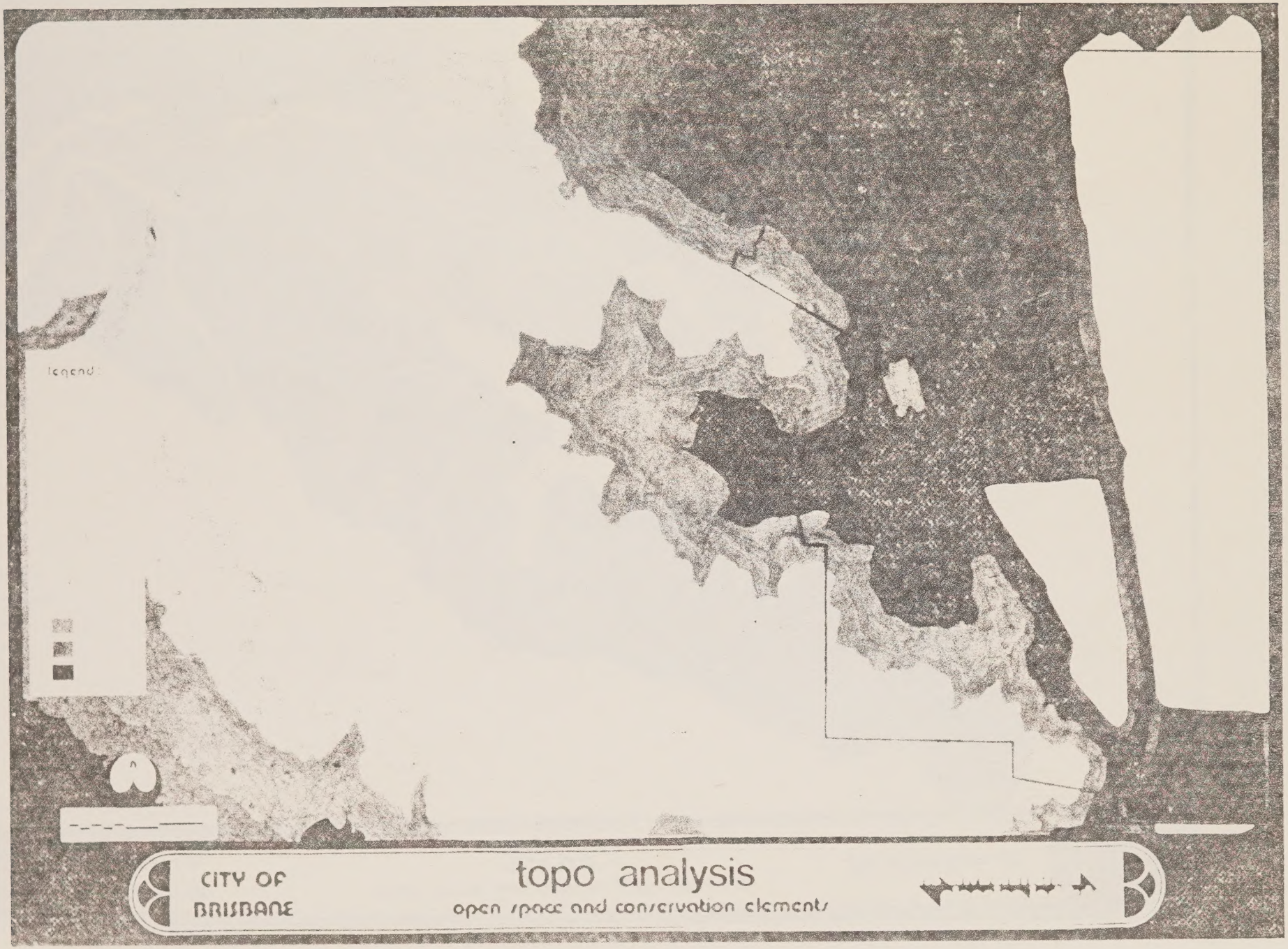
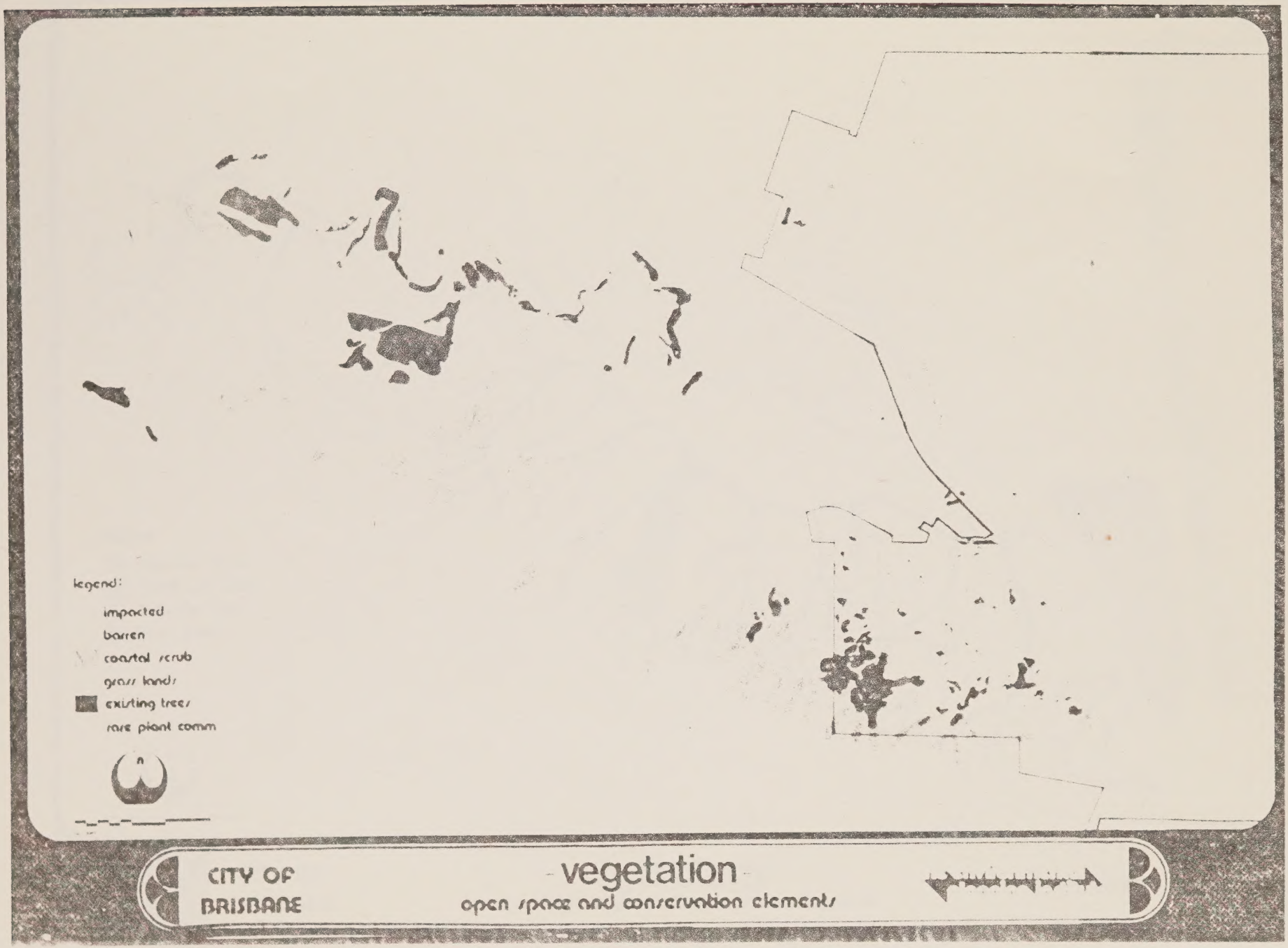
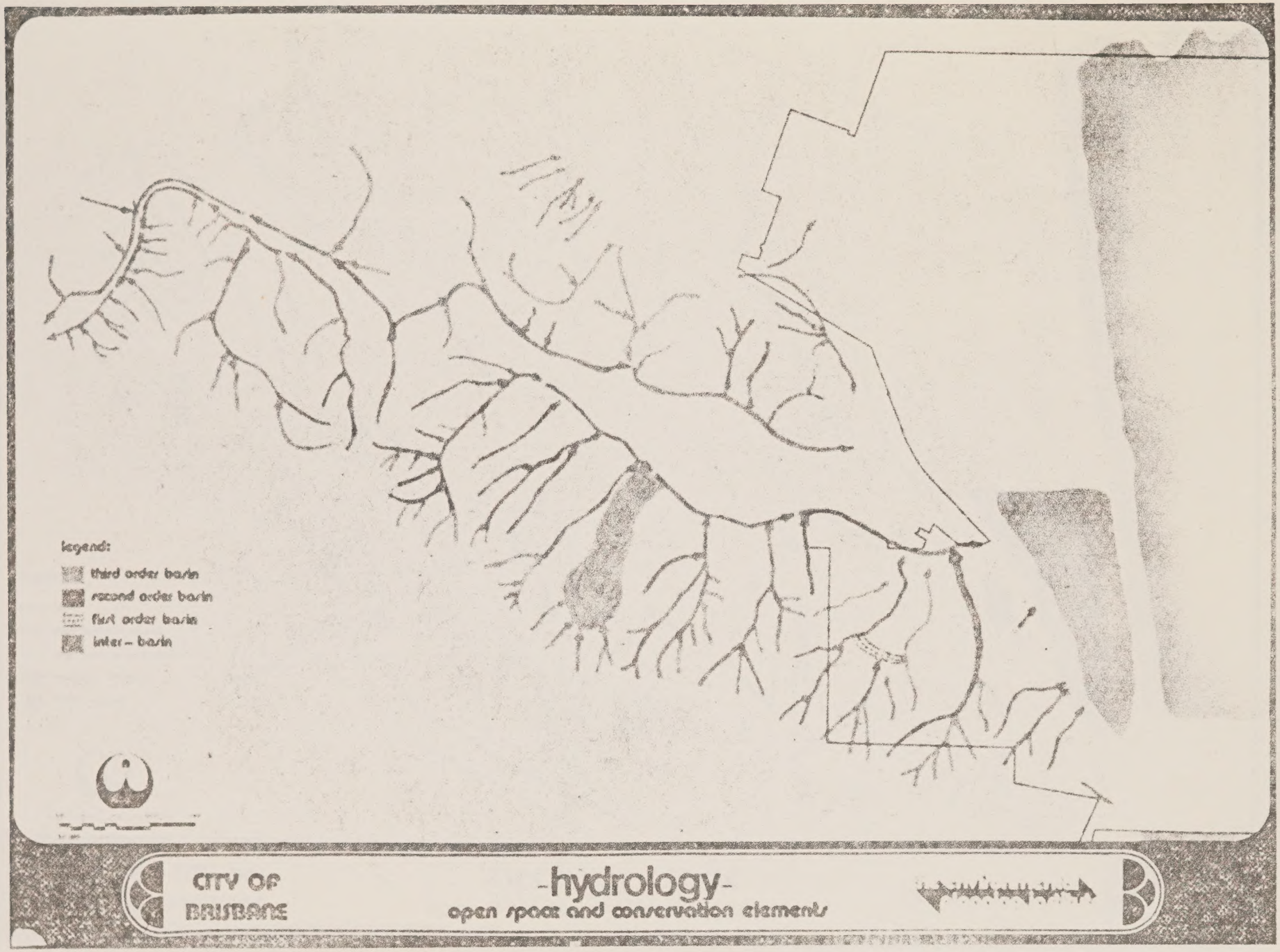
CITY OF
BRISBANE
slope analysis
open space and conservation elements


legend
CITY OF
BRISBANE
topo analysis
open space and conservation elements

legend:
hot spot
bottomland
north
east
west
south
CITY OF
BRISBANE
-aspect-
open space and conservation elements

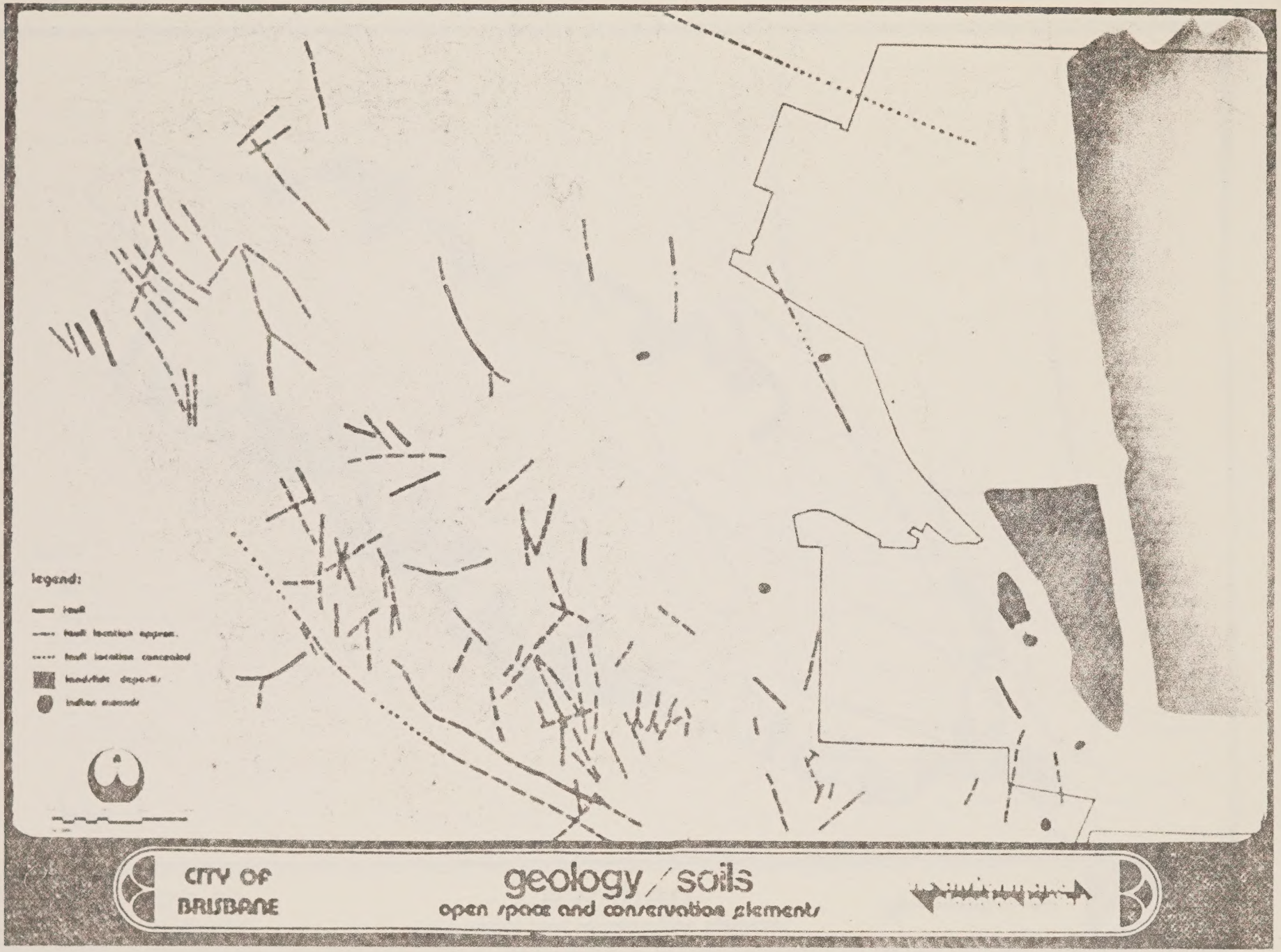

legend:
impacted
barren
coastal scrub
grass lands
existing trees
rare plant comm
CITY OF
BRISBANE
vegetation
open space and conservation elements

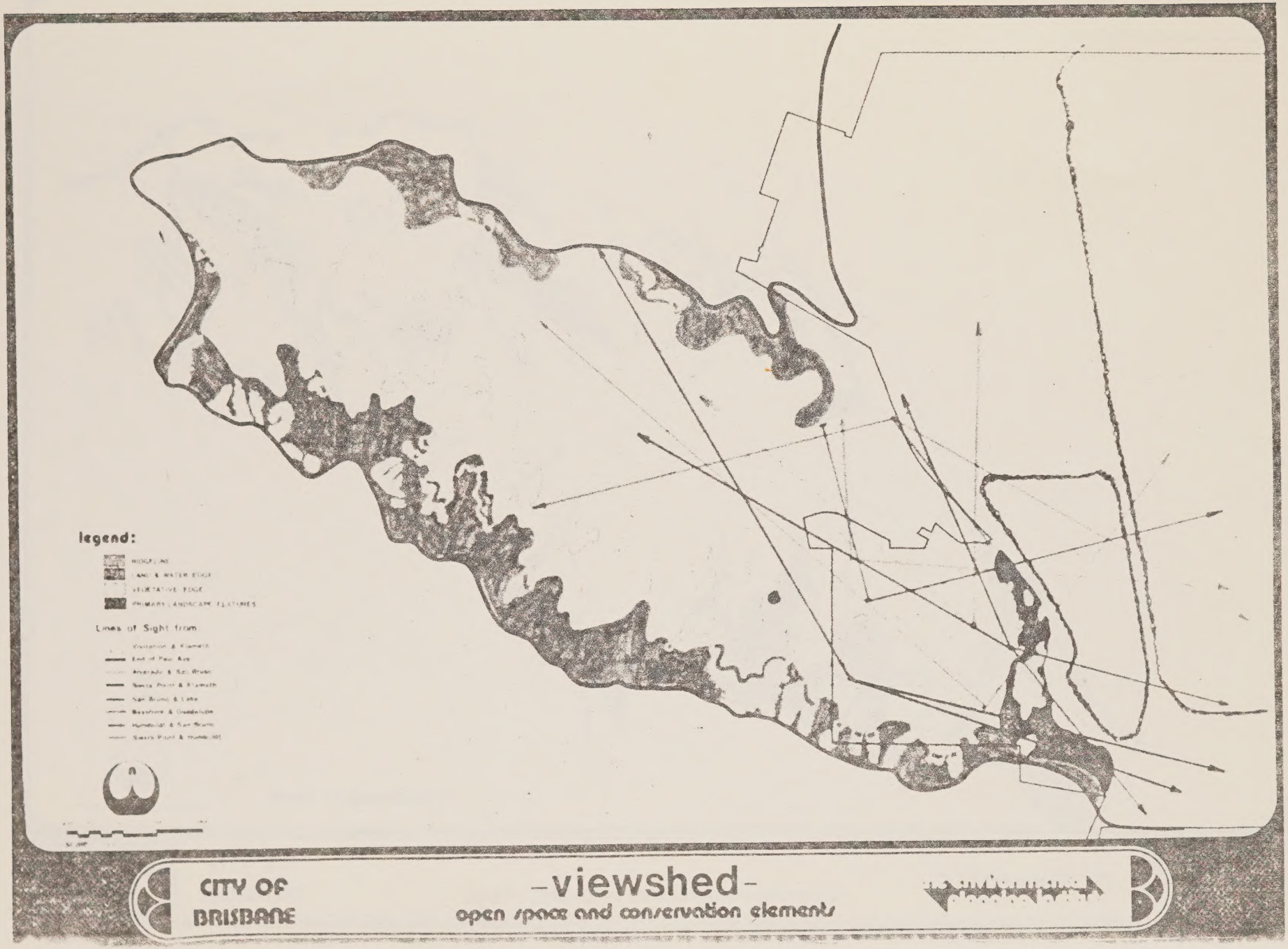


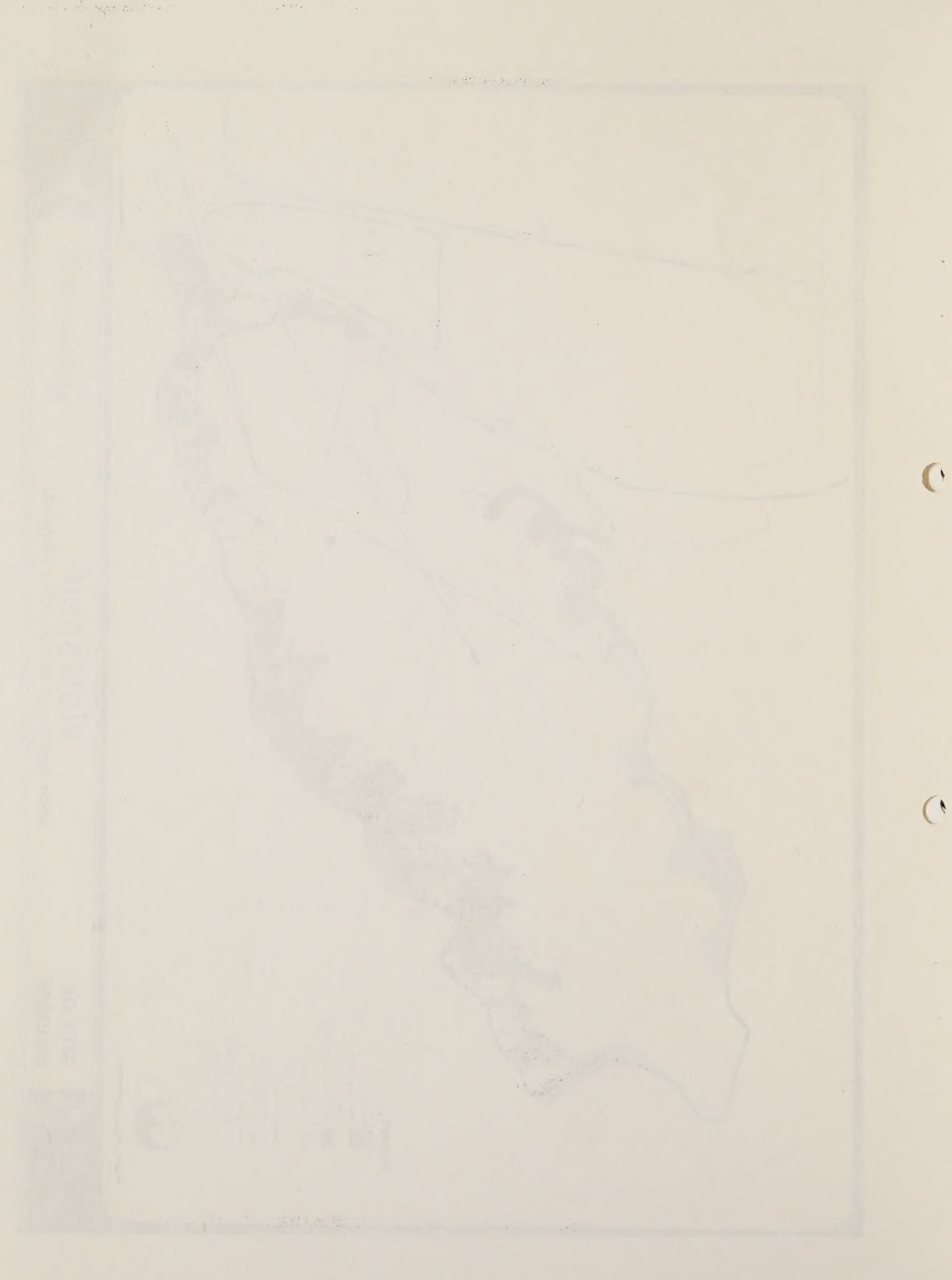
CITY OF BRISBANE

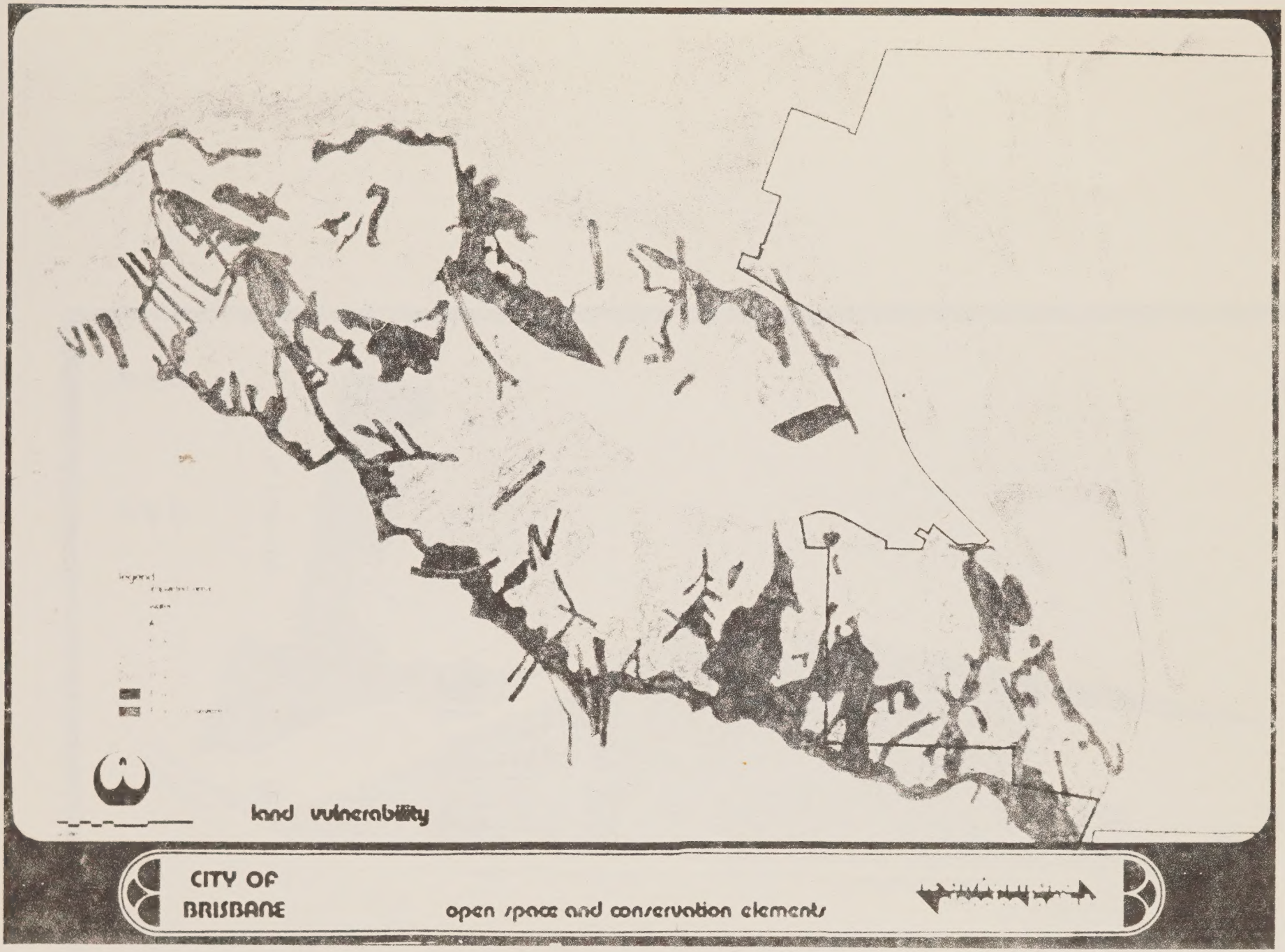
-hydrology-

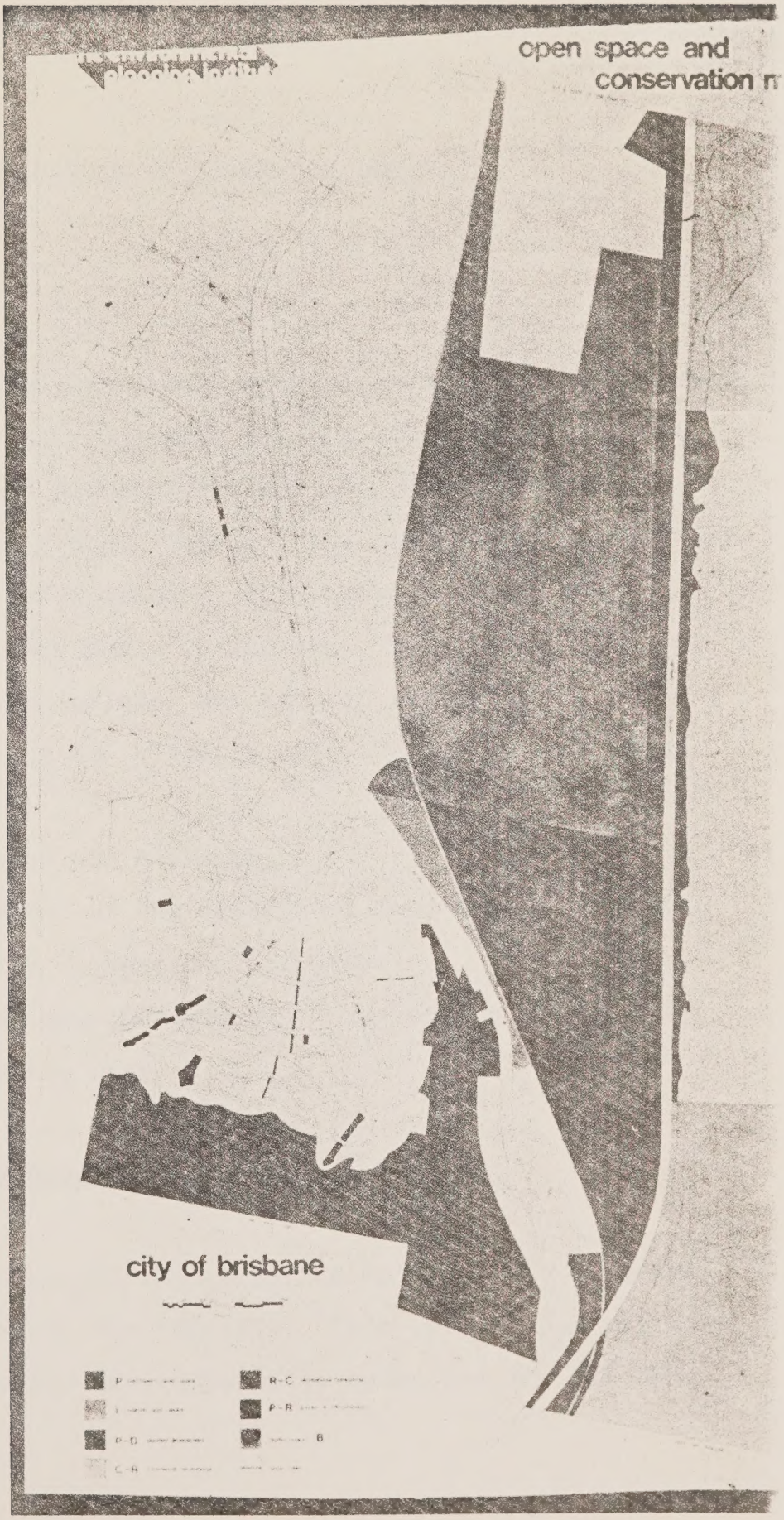
open space and conservation elements


legend:
CITY OF
BRISBANE
geology / soils
open space and conservation elements


legend:
Lines of Sight from
CITY OF
BRISBANE
-viewshed-
open space and conservation elements




3
land vulnerability
CITY OF
BRISBANE
open space and conservation elements


open space and
conservation
city of brisbane

CHAPTER THREE: ANALYSIS OF COMMUNITY NEEDS

Introduction

Public meetings and individual conversations with the citizen's of Brisbane; the City Council; the Planning Commission, the Parks, Beaches and Recreation Committee, have provided a broad spectrum of wishes, desires, and concerns as regards the recreation needs of Brisbane. This broad spectrum can be summarized into five basic categories. These basic areas of needs and concerns include, but are not limited to:

1) Preserving the hillside and ridgeline of San Bruno Mountain;
2) The Lagoon and bayfront;
3) Development of the industrial land within the City;
4) Community recreation facilities;
5) Proposed developments and construction within and without the City.

The Hillside and Ridgeline

The northerly slope and the ridgeline of San Bruno Mountain serves as a backdrop for the City. This undeveloped hillside area is visually and environmentally sensitive and the Land

Vulnerability Analysis suggests that any development there be severly restricted.

San Mateo County has placed an R-M zoning on the areas adjacent to east and south boundaries of the City. This R-M zoning protects the ridgeline and part of the hillside. Areas of the hillside which are inside the city boundaries can be controlled by regulation as outlined in Chapter Seven of this element and by taking action on the policies stated in Chapter Six. So, the hillside and ridgeline can be preserved and protected, environmentally and visually, by regulation and not purchase.

The Lagoon and Bayshore

In addition to the hillside, the Lagoon and Bayfront probably should be considered most important areas for concern to the City. These areas are probably as visually and environmentally sensitive and significant as the hillside. These two areas, singularly or together, contain the highest inherent potential for recreational purposes, or uses. These recreational purposes could include fishing, boating, bicycle and/or hiking trails, etc.

The Lagoon and Bayshore areas have been studied in depth. Some of the results of these studies are the fact that portions of the land underlying the waters of the Lagoon are in private ownership. The Bayshore is partially owned by the State and private interests. In Chapters Six and Seven, methods are explored for acquiring possible City control over these areas for use as open space and recreational purposes.

The Industrial Lands

The industrial lands north of the Lagoon are the largest area of existing open space within the City. The greatest portion of this land is privately owned by the Southern Pacific Railroad. Existing uses of portions of this large tract are a railyard facility, some scattered light industry, and a fuel storage-tank farm. The light industries presently occupying portions of the land seem to be located in a hodge-podge manner with no general plan apparent.

A major portion of this area, not presently being used for industrial purposes, is sanitary land fill which will require 15 years settling before it's ready for permanent structures. This fact was brought out in conversations with personnel of the Southern Pacific. These conversations also revealed that

the Southern Pacific has plans to relocate the railyard facility. They have not as yet determined a time schedule for this relocation. However, when this occurs, approximately 120 acres of usable land will become available for development.

Almost all this industrial land area is visible from the City at one point or another, therefore the area is visually sensitive as a viewshed of the City. Interim uses of these industrial lands have been proposed by the Southern Pacific and should be considered by the City in relation to the policies set forth in Chapters Six and Seven and through the analytical processes described in Chapter Two

Community Recreation Facilities

A notice was posted and published in the local newspaper announcing a public meeting to discuss and determine the recreational needs of the City. Also, individual conversations were held as stated in the introduction to this chapter.

The results of these meetings and conversations, as regards community recreation facilities, were rather nebulous because

they were not based on a statistical survey and projections. However, certain items and proposals were discussed frequently enough to warrant further study at this time. These items and proposals for specific recreational needs and where they should be located included a community swimming pool, tennis courts, and the possibility of enlarging the Community Center into the "Johnson property". Also, discussed was the question of purchasing a privately owned parcel on Visitacion which is presently being used as an urban pocket park.

The variously proposed locations of these recreational facilities have been studied and some of the results of these studies are set forth in Chapter Seven. These locational studies were based solely on considerations of required land areas and slopes, noise factors, and climatic conditions usually required for the uses proposed.

However, as mentioned, the stated needs are nebulous in that they are not based on a complete survey of the citizens and statistical projections of the desires and needs of the residents cannot be made. Also, frequency of use patterns are not available as a tool in the decision-making process of priorities and locations.

A questionnaire has been devised as shown in Exhibit 3 - 1. This questionnaire should be mailed to all the residents of Brisbane and the results tabulated on a total basis and an area basis. These results will provide the necessary statistical tool for decision making with regard to needs (interest), frequency of use (priorities), and areas of location.

Proposed Developments

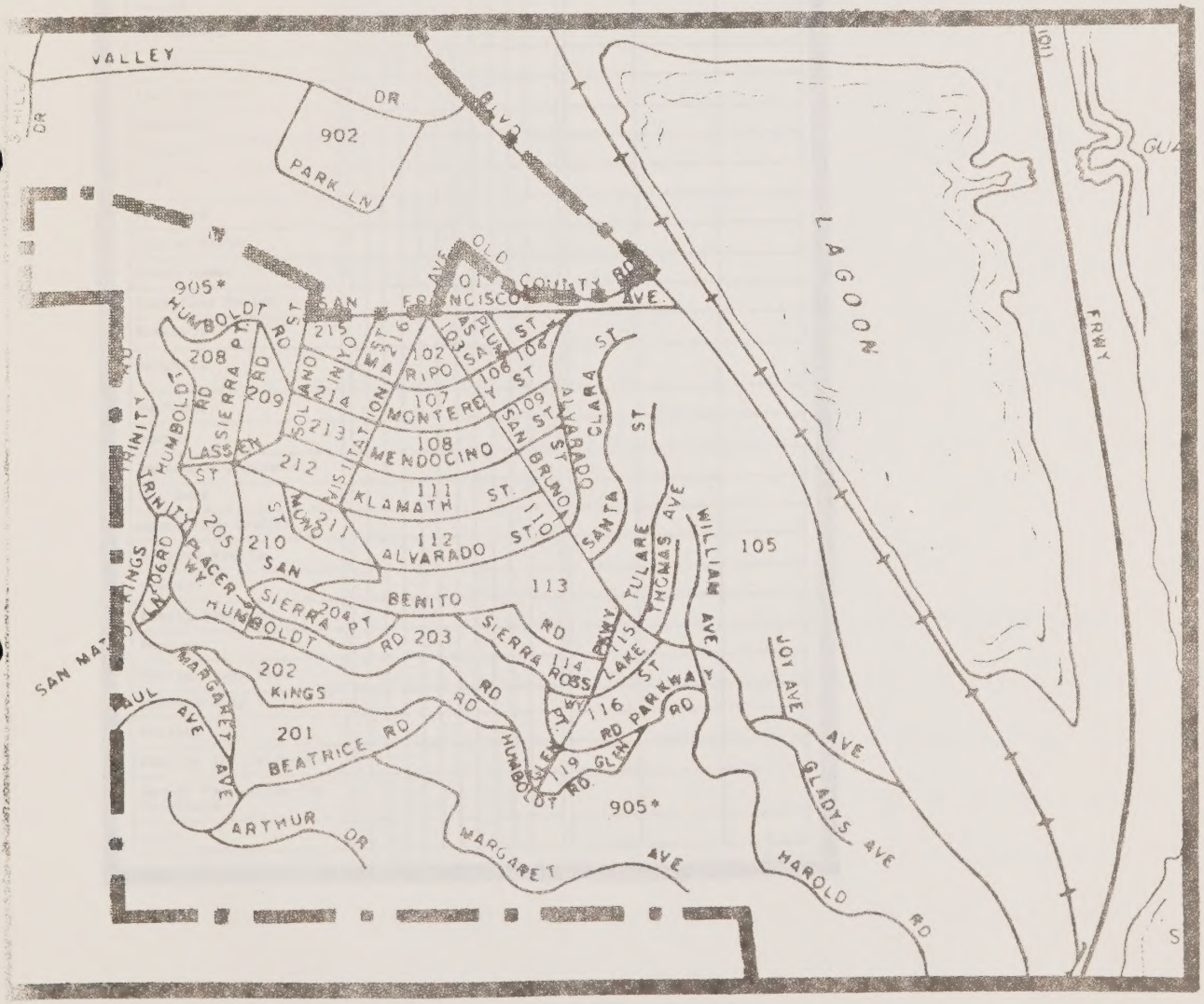
San Bruno Mountain is one of the major recreational resources of the City of Brisbane. There are many environmental and cultural amenities within the mountain area which need protection. And, several public and private proposals have been made and are being investigated and considered which will directly affect the residents of Brisbane. Methods whereby the City can regulate some of these areas are discussed in Chapter Seven.

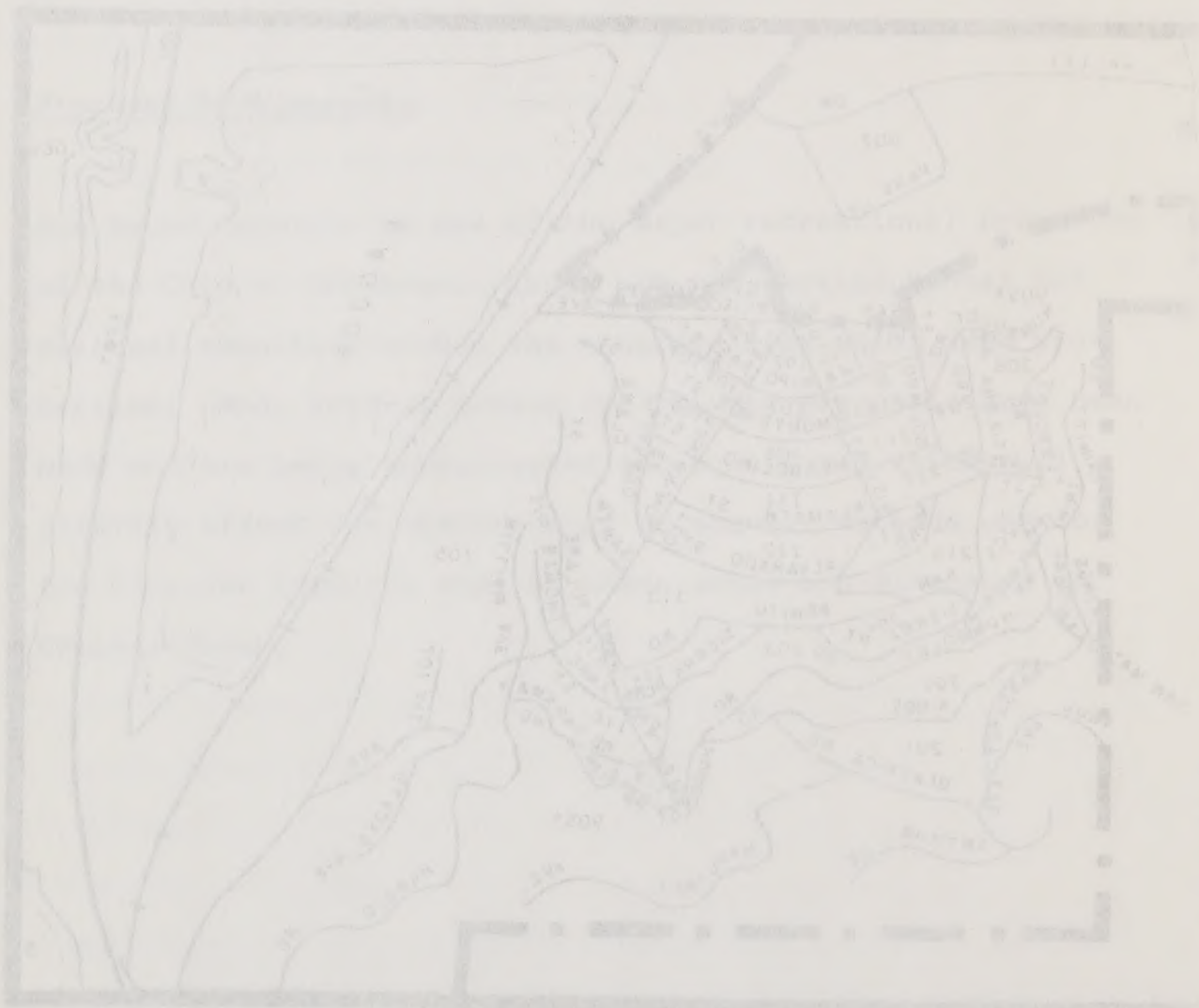
Dear Resident;

The City of Brisbane, in an effort to determine the public recreational needs of our community, has prepared the following questionnaire and requests your cooperation.

Assuming that facilities were available for the following activities, please place an "x" in the box which most nearly expresses your interest in the activity and how often you would participate.

Please indicate the area in which you reside _____





RECREATION QUESTIONNAIRE

ACTIVITY	INTEREST (none 0 1 2 3 4 5 6 7 8 9 10 very)	FREQUENCY (daily / weekly / monthly)
Senior Citizens Center		
Teenage Center		
Physical Fitness Classes		
Basketball		
Roller Skating		
Badminton		
Volley Ball		
Tennis		
Horseshoes		
Tetherball		
Lawn Bowling		
Bocceball		
Archery		
Golf		
Swimming		
Wading Pools		
Court Games		
Turf Play Fields		
Softball		
Baseball		
Football		
Soccer		
Benches & Shelters		
Tot Lots		
Equestrian Trails		
Bicycle Trails		
Hiking		
Family Picnics		
Fishing		
Nature Study Area		
Amphitheatre		
Sailing		
Storage for Sailboats		
Rental Facilities for Sailboats		
Other		

CHAPTER FOUR: ANALYSIS OF LAND NEEDS FOR PROJECTED URBANIZATION

Projections for the urbanization of the City of Brisbane, within its present boundaries, cannot be made because of a lack of a proper projection data base. The City was not incorporated until November 27, 1961. Therefore, the 1960 census figures were included in the San Mateo County unincorporated area.

The State of California, in 1965, estimated the city's population at approximately 3,000 persons. The 1970 census indicated a population of 3,022. If the State's 1965 estimate is accepted as being realistic, then the assumption must be made that no growth has occurred within the past five years. Thus, a statistical projection is impossible and irrelevant.

On-site investigations, studies of aerial photographs, the Land Vulnerability Analysis and Impact Analysis reveal a very small portion of lands available for residential development within the city boundaries. Therefore, it can be assumed no change of major significance can take place within the existing city area. (See Map of Undeveloped Lots, Exhibit 4 - 1)

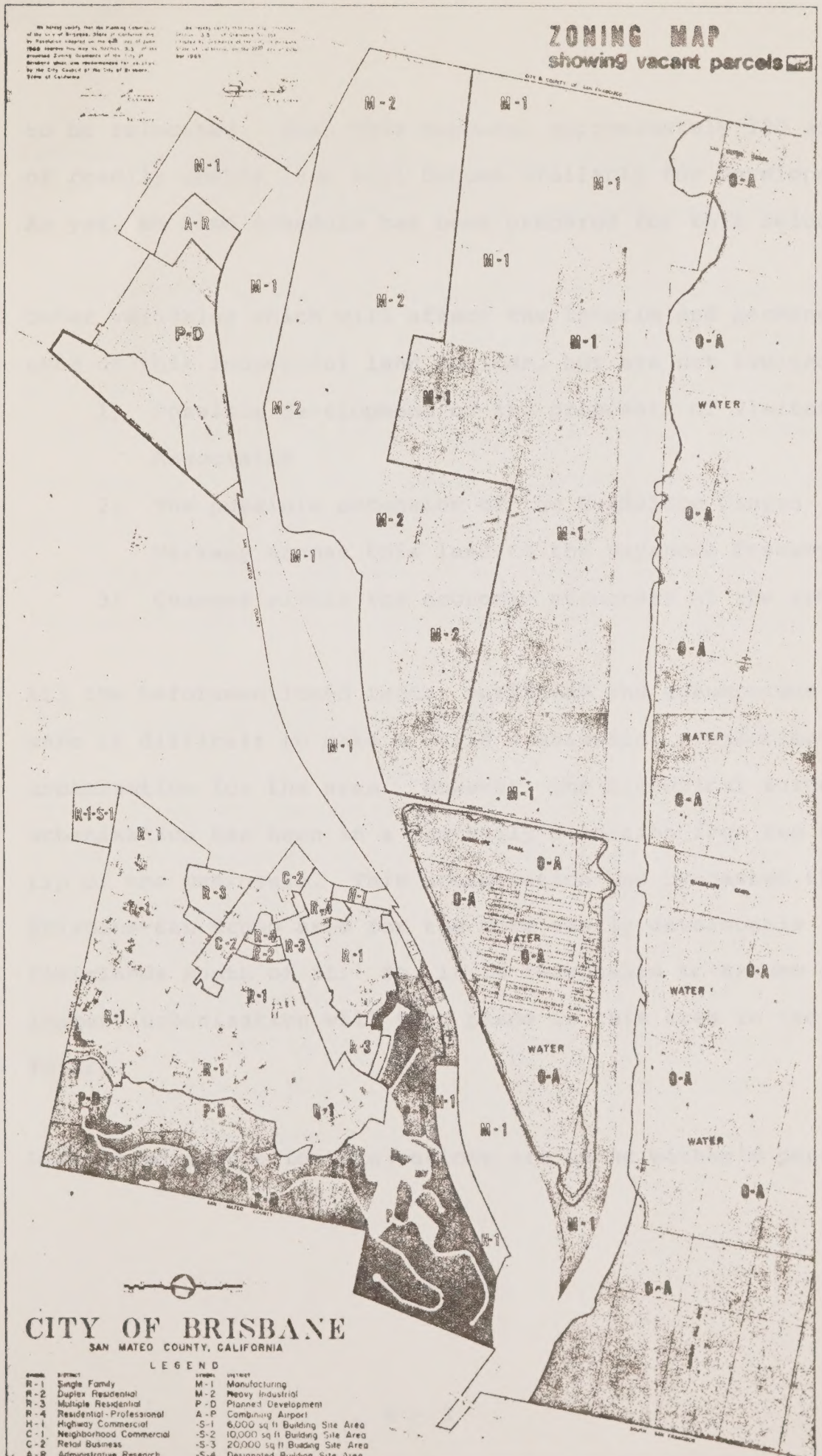
Major residential and commercial growth impacts upon Brisbane

will come about, most likely, from areas presently outside the jurisdictional boundaries of the City. Visitation Associates has prepared a development proposal which has been submitted to San Mateo County with a request for a General Plan Amendment. This plan has also been presented to the San Mateo County Local Agency Formation Commission for study. The proposed project, as presently constituted, will have significant impacts upon the City of Brisbane as well as other surrounding areas.

Since many agencies are involved in determining the future of the unincorporated lands surrounding Brisbane, assumptions cannot be made at this time, concerning future populations. However, the City should be active in determining the future uses of these unincorporated lands.

Estimations and projections of industrial urbanization within the city limits is subject to many variables. All the M-1 and M-2 lands north of the lagoon are sanitary land fill and subject to settling. The Southern Pacific Co., owners of most of this land, estimates that a period of fifteen years will be required before this land is stabilized enough to permit construction of permanent structures on it. The railroad yard facilities located on this property are proposed

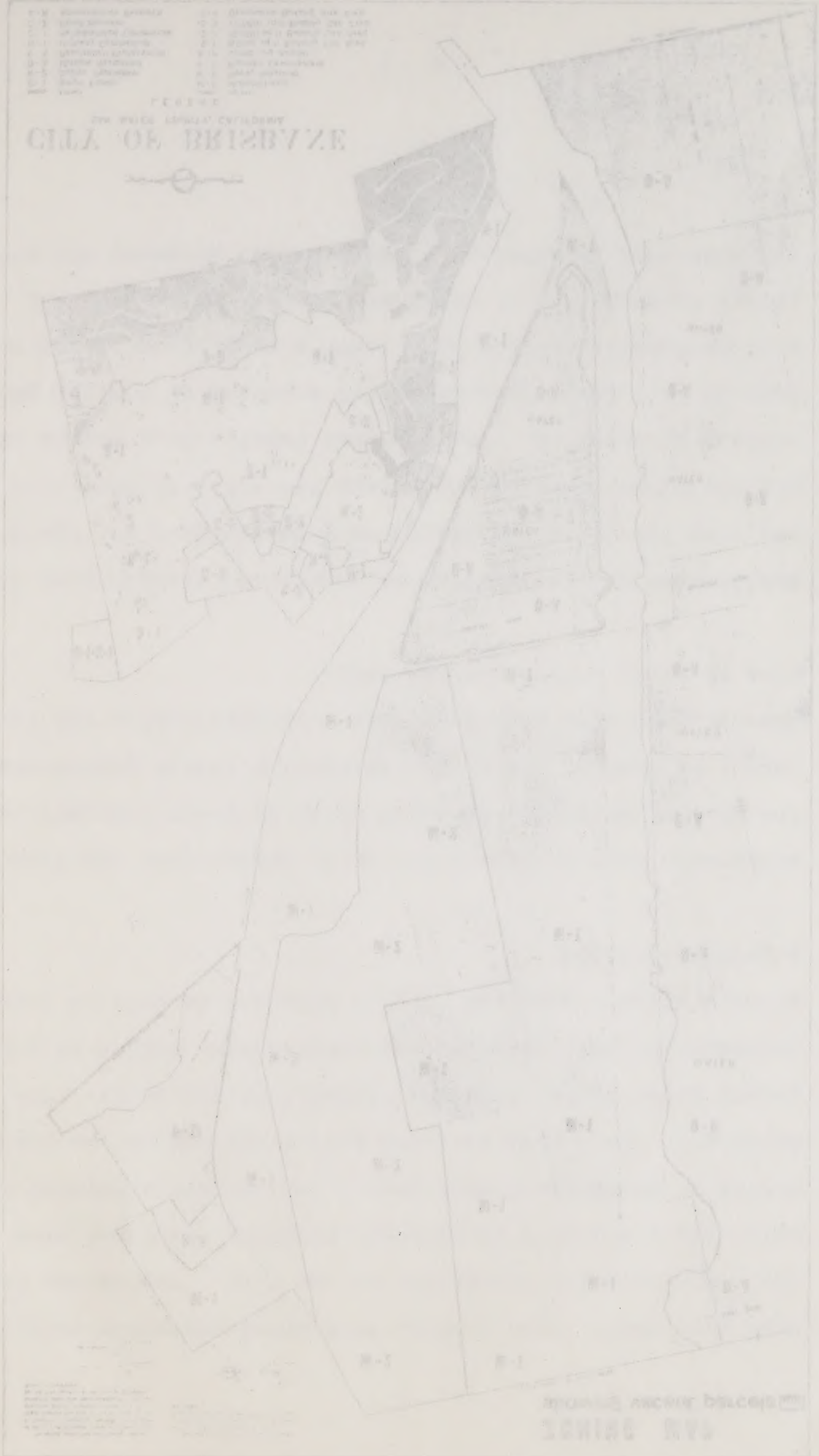
ZONING MAP
showing vacant parcels



CITY OF BRISBANE
SAN MATEO COUNTY, CALIFORNIA

LEGEND

Symbol	District	Symbol	District
R-1	Single Family	M-1	Manufacturing
R-2	Duplex Residential	M-2	Heavy Industrial
R-3	Multiple Residential	P-D	Planned Development
R-4	Residential-Professional	A-P	Combining Airport
H-1	Highway Commercial	-S-1	6,000 sq ft Building Site Area
C-1	Neighborhood Commercial	-S-2	10,000 sq ft Building Site Area
C-2	Retail Business	-S-3	20,000 sq ft Building Site Area
A-R	Administrative Research	-S-4	Designated Building Site Area



to be relocated. When this happens, approximately 120 acres of readily usable land will become available for development. As yet, no time schedule has been prepared for this relocation.

Other variables which will affect the interim and permanent uses of this industrial land include, but are not limited to:

1) Possible development of the proposals of Visitation Associates
2) The possible extension of the Guadalupe Canyon Parkway across this land to the Bayshore Freeway
3) Changes within the economic structure of the area.

All the beforementioned facts, variables and assumptions make it difficult to make a valid statistical projection of urbanization for the area. However, the historical surge of urbanization has been in a southerly direction from the northern tip of the peninsula. This urbanization has by-passed the Brisbane-San Bruno area for the more easily developable flat-lands south of it. So, it is reasonable to assume development/urbanization will take place in this area in the future.

Definitive population projections are being withheld pending

the decisions of many agencies involved in the numerous variables mentioned in this chapter.

CHAPTER FIVE: OPEN SPACE PLAN AND DEFINITIONS OF LAND USE CATEGORIES

The Conservation and Open Space Elements for the City of Brisbane are described on the map contained within this chapter. Once the areas which are to be preserved as Open Space have been described on the map, it becomes necessary to determine the uses these areas can sustain. The Land Impact Analysis (Chapter Two) is interfaced with the Land Vulnerability Analysis to define the uses of each area. These uses are then categorized into a Land Use Plan of the Open Space.

Definition Of Land Use Categories

Prior to stating the rationale for each area's use it is necessary to categorize and define the Land Uses. The Land Uses designated on the Open Space Map are defined as:

PERMANENT (P) - This designation has been applied to lands which have been determined to have a severe vulnerability. Uses of land within areas so designated shall be any activity with a maximum Land Impact Rating of 12.

PLANNED DEVELOPMENT (P-D) - Much of the hillside land within the City has a severe vulnerability but is privately owned. Studies of the uses of the lands designated thusly had to consider not only the severe vulnerability of the land but also the inherent rights of the land owners. No use with a Land Impact Analysis greater than 30 points should be allowed on lands under this designation without special Planning Commission hearings. And, an Impact Analysis (as defined in Chapter Two) should be required along with any application for building permit.

INTERIM (I) - An Interim designation is similar to an urban reserve/open space in that the land as it now exists may not be suitable for development but may become so in the future. (e.g., sanitary fill). This designation should apply to the area until it is suitable for development, at which time the owner should request removal of the Interim Open Space designation and submit a specific plan for development. No use with a Land Impact Rating greater than 30 should be allowed on any land while under this category without special Planning Commission hearings.

RECREATIONAL COMMERCIAL (RC) - Uses to be allowed under this category are those which are primarily of a low impact recreational purpose (such as boating) but which may require a minor commercial activity (such as a row-boat rental dock and office or refreshment stand). No use should be allowed on lands under this category which have a Land Impact Rating greater than 30.

COMMERCIAL RECREATIONAL (CR) - Lands placed within this category are those which have a potential for commercially oriented recreation. This would include such items as marinas, boat ramps, restaurants and shops which are usually appurtinent to such areas. However, no use should be allowed which has a Land Impact Rating greater than 50 points.

PARKS AND/OR RECREATION (PR) - This category is basically self-explanitory. Uses under this designation should include parks for passive recreation and would allow benches, tables, etc. This designation also includes any areas for active recreation such as community tennis courts, swimming pools, community centers, etc.

BUFFER ZONES (B) - Buffer zones act as a transitional area between one land use and another (e.g., a vegetative screen between a residential zone and a commercial zone). Buffer zones can be natural forested areas or managed landscaped areas. Buffer zones may be used for any purpose with a Land Impact Rating not greater than 12.

Rationale For Open Space Plan Land Use

The following discussion relates to the Open Space Land Use Plan for the City of Brisbane and sets forth the rationale for the application of the foregoing use designations to the land.

The Planned Development (PD) designation has been applied to the hillside surrounding the urbanized area because of its severe vulnerability to construction or development of any type. A Permanent (P) designation was not deemed applicable due to the private ownership of the land and the inherent rights of the owners. The PD designation will give the City strong regulatory powers over this. These powers are discussed in Chapters Six and Seven.

The areas designated on the map as Parks and Recreation

(PR) are existing City owned park areas and other areas which are either City owned lots or street rights-of-way which have not or are not usable as streets.

The Lagoon, and certain lands usually considered appurtenant to it, has been designated Recreational Commercial (RC) because of its inherent qualities as a low-keyed area of active and passive recreational uses. A major portion of it is visible from various parts of the city and therefore it is also a valuable resource as a viewshed. Low-keyed activities within this area would include row-boats and canoes on the Lagoon, fishing, bicycle and hiking paths around it, etc.

A Buffer Zone (B) is designated on the map between the northerly edge of the lagoon and the industrial lands north of it. The final width of this Buffer has not been determined and the area shown on the map is not precise. The final actual width will be determined at the time of request for development permit for the industrial land. In other words, the width will be determined by the permanent use of the industrial lands and the lines-of-sight from the surface of the Lagoon, Old Bayshore Boulevard and certain points within the urbanized area of the City.

An Interim (I) designation has been placed on those industrial lands north of the Lagoon which are sanitary land-fill. This land is said to require fifteen years of settling before it is ready for permanent structures. In the meantime, the owners have the right to use it for income producing purposes which do not require permanent structures. And, the City has the right to restrict and regulate these uses. The power of the City to do so is discussed in Chapter Seven.

A small area along the Bayshore, near the northerly boundary of the City, and easterly of the Bayshore Freeway, has been designated Recreational-Commercial (RC). This would allow some sort of parking facility to be placed on the land for use of people wishing to walk along or fish from the shore.

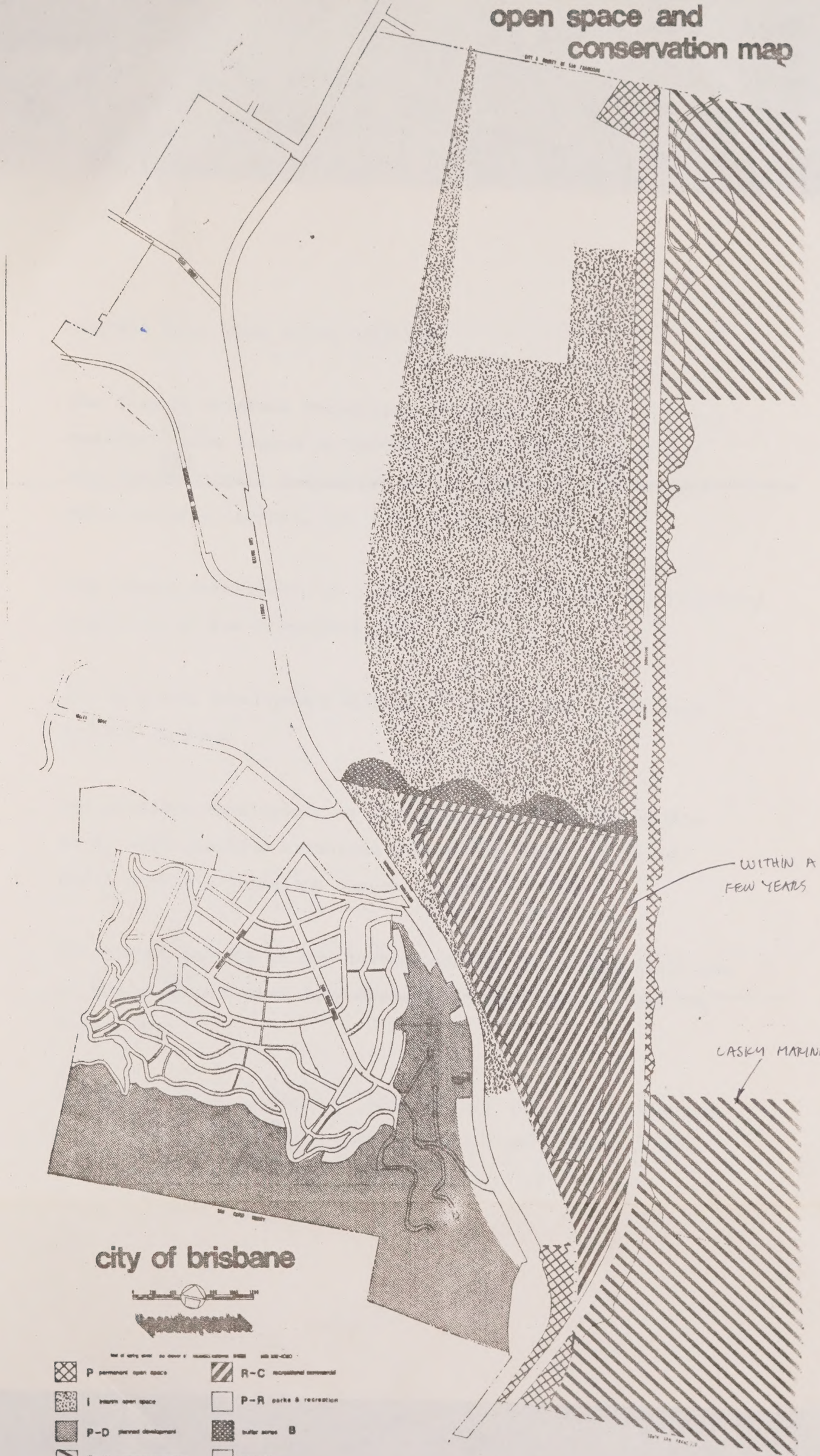
An impact has already been placed on this area by a road which was built some time ago.

The narrow stretch of land lying between the shore and the freeway has been designated Permanent (P) Open Space primarily because of its Scenic Area Designation and also to prevent further sanitary land fills which would destroy its natural beauty and potential as a recreational area.

The large sanitary land fill area near the southerly boundary of the City has a great potential as a Commercial-Recreation area. This designation gives the City the option of allowing

carefully controlled commercial uses that would also provide additional diverse recreational facilities. There are numerous methods by which the City, either singularly or in cooperation with private enterprises, could benefit monetarily from this land. Additionally, any fiscal benefit from this area could be applied toward the costs of acquisition, construction and maintenance of recreational facilities within the existing urbanized area. The examples listed in the definition of the C-R designation could give the City a large fiscal boost and the City should explore a feasibility study and specific plan of the area with regard to constructing marina facilities there.

open space and conservation map



CHAPTER SIX: OPEN SPACE POLICIES

The City of Brisbane recognizes the specific concern of its residents with regard to certain areas within and without the jurisdictional boundaries of the City. These areas of major concern include, but are not limited to:

Any future development or construction on or near the southerly ridgeline of San Bruno Mountain;

Any proposed development within the areas known as Buckeye and Owl Canyons;

Any proposed development or construction within the Saddle area, with specific attention toward the intersection of Radio Road and Guadalupe Canyon Parkway;

The visual impacts of any development on the scenic qualities of the area as viewed from Guadalupe Canyon Parkway and the City proper.

Therefore, in an attempt to conserve and control its environment and open space resources and to ensure compliance with this Conservation and Open Space Element, the City of Brisbane hereby states that the following policies shall be used as guidelines:

Plans for development should be in the nature of a Specific Plan not a generalized zoning ordinance.

Plans for development shall be reviewed and analyzed in accordance with Land Use Impact and its relation to the Land Vulnerability as detailed in Chapter Two of this Element.

The Land Vulnerability Analysis and Land Use Impacts detailed in Chapter Two reflect only the natural characteristics of the land and do not include citizen input. The Vulnerability and Impact Analyses are to be used as analytical tools to guide decision making by the residents or their elected officials.

The City recognizes that it is beyond the legal and fiscal capabilities of the City to regulate possible developments of San Bruno Mountain. However, the City shall explore all possible measures available for interacting with other agencies and interfacing the concepts, policies and analytical processes put forth in this document. And, in the intended spirit of this policy the City will maintain an attitude of open-mindedness with regard to the proposed Visitacion Rancho pending an analysis of the Environmental Impact Report currently being prepared.

Plans for development should be fitted to topography, soils, and vegetative cover, to create the least impact potential possible.

When land is exposed during development, exposure should be kept to the shortest practical period of time.

The smallest practical area of land should be exposed at any one time during development.

Where the use of the land does not require the removal of trees and other natural vegetation, these shall be retained and protected.

Where development or construction occurs, permanent protective vegetation should be installed as soon as possible during the development or construction.

All development plans shall require proof that the soil is suitable for the intended use or construction.

All development and building plans shall show existing vegetation and proposed clearance patterns.

Clearance permits should be required when total clearance is to exceed 30 percent of the proposed development or construction site.

- Roots of remaining trees shall not be covered with more than six inches of fill. Precautionary methods shall be used to protect against root damage due to paving, site alteration and cut-fill operations.

- Vegetation along all stream banks should be protected in order to insure stream bank stabilization.

- Any future development within industrial areas should follow usual Planned Unit Development Standards in that these standards are intended to encourage ingenuity and innovation in site planning and design. An additional advantage of applying usual P.U.D. development standards to industrial areas is that a true park-like atmosphere can be provided. The planned unit development approach is one of the most important tools for assuring wise utilization of land.

- Future developers of the industrial lands should be encouraged to utilize not only the P.U.D. standards mentioned above, but also the super-block type of development. This type of layout usually results in major circulation routes around large parcels of land, culs-de-sac where needed for penetration into the super-block, and adaptation of greenbelt open spaces between and among all the buildings.

. Development of the industrial lands with a view to maintaining aesthetic values, not only from the pedestrian view but also the aerial view, is of major importance to the City. This is caused by the higher elevation of most of the residential area over the industrial area. The industrial area is a major viewshed from many parts of the City.

. ALL DEVELOPMENT PLANS AND BUILDING PERMITS SHALL BE REVIEWED FOR CONFORMANCE WITH THE ABOVE PRINCIPLES AND IN RELATION TO THE IMPACT ANALYSIS UPON THE VULNERABILITY OF THE LAND AS SET FORTH IN THIS ELEMENT.

CHAPTER SEVEN: ACTION PROGRAM AND IMPLEMENTATION

Part I: Action Program

The protection of the ridge-line and hills require the following actions:

- A density transfer provision (as detailed in Part II of this Chapter) be adopted as an amendment to the Zoning Ordinance to allow the transfer of building credits to more environmentally advantageous development sites.

- Review all city ordinances with City Attorney for conformity and/or needed revisions to implement policies stated within this Element.

Many actions and major decisions will be required for the conservation and utilization of the Lagoon and Bayfront, these include, but are not limited to:

- Acquisition of title to the land beneath the waters of the Lagoon.
- Acquisition or regulatory control of a buffer zone between the north edge of the lagoon and the industrial properties to the north. The width of said buffer-zone to be contingent upon the uses of the industrial lands.

- The water area of the lagoon and adjacent land areas usually associated with it be designated as Open Space-Recreational Commercial.
- Insure bicycle and pedestrian access to the lagoon and bayfront.
- Institute an economic feasibility study as preliminary to developing a specific plan for the lagoon and bayfront properties.
- Develop a specific plan for the lagoon and bayfront in relation to the feasibility study mentioned above.

The industrial lands northerly of the lagoon can be protected best by revising the present zoning to M1-PD and/or M2-PD. The existing zoning ordinance will require an amendment for this proposed zoning. Utilization of this concept is in keeping with the policies stated in Chapter Six of this Element.

Community recreational facilities have been discussed at length in Chapter Three of this Element. In relation to this the following actions are needed.

- A bicycle trail system to be detailed in the Circulation Element of the General Plan.
- The Parks, Beaches & Recreation Commitee should be made responsible for:

1) Distribution of Recreation Questionnaire described in Chapter Three

2) Proposing specific recommendations based on the Questionnaire results.

A joint decision by the City Council and Planning Commission be reached concerning the requested expansion of the community center.

The City should explore, with the School District, the possibilities of locating a community swimming pool in what is now the lawn area to the west of elementary school building and adjacent to the school parking lot.

Other actions required, of a general nature, are:

That the present entrance into Brisbane be designated as open space on an interim basis pending the results of the studies to relocate said entrance.

The City begin studys concerning possible relocation of the entry into Brisbane.

That the upper portion of Lassen Street be developed as an urban trail or pocket park.

That Lot 7, Block 28 be acquired and developed as an urban trail and/or pocket park.

Part II: Implementation (The regulatory Authority Of The City In The Preservation Of Open Space)

The California Enviornmental Quality Act, enacted by the State in 1970, requires that an Environmental Impact Report must be prepared for any discretionary project "which may have a significant effect on the environment".

The State defines a significant effect on the environment as:

a. A proposed project that has the potential to degrade the quality of the environment, curtail the range of the environment, or to achieve short-term, to the disadvantage of long-term, environmental goals;

b. The possible effects to a project are individually limited but cumulatively considerable;

c. The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

State of California requirements further stipulate that the Environmental Impact Report contain:

a. The environmental impact of the proposed action.

b. Any adverse environmental effects which cannot be avoided if the proposal is implemented.

c. Mitigation measure proposed to minimize the impact.

d. Alternative to the proposed action.

e. The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.

f. Any irreversible environmental changes which would be involved in the proposed action should it be implemented.

g. The growth-inducing impact of the proposed action.

The impact report is considered an "informational document which ... shall be considered by every public agency prior to its approval or disapproval". Supplemented with the land vulnerability procedure detailed in this Element, these two analysis-information tools should provide a sound basis for the evaluation of future development proposals.

This Open Space and Conservation Element if nothing else should be an exercise in making explicit the environmental constraints of the land and making explicit the desires, policies and objectives of the people of Brisbane in regard to open space and conservation.

What is also needed are regulations on development that reflect in themselves the adaptability, creativity and sensitivity

that the city desires in the development proposals that come before it.

In order to provide a framework for development that allows legitimate and positive growth to occur and at the same time meet the environmental concerns of the citizens of Brisbane, we propose the following types and methods of control be enacted:

Density Transfer

It is possible that out of the analysis of a specific piece of property that the vulnerability analysis and the E.I.R. process may suggest a severly limited amount of development. A density transfer ordinance would allow the owner of that property to sell those remaining development credits to the owner of property deemed more suitable for development.

In this way the city can preserve environmentally vulnerable land and foster development on land most suited for it.

Specific Plans

Specific plans can include all detailed regulations, conditions, and programs necessary or convenient for the systematic implementation of every element of the general plan including

the open space plan. Utilization of these provisions will permit local governments to determine in advance what is acceptable rather than simply accomodating itself to the proposals put forth by developers.

Dedications and Conditions

Conditions may be attached to virtually all forms of development approval, such as zoning changes, subdivision map approval, zoning variances, use permits, and building permits. State law places limitations upon the imposition of some conditions. The required dedication of land or the payment of in lieu fees for park and recreation facilities as a condition to subdivision approval is controlled by the provisions of the Subdivision Map Act. The land or fees required may only be used for facilities which serve the subdivision and the extent of the conditions must have a reasonable relationship to the use of the facilities by the future residents of the proposed subdivision.

Gifts

The City of Brisbane may be given land for philanthropic or other reasons. The City of Brisbane should make this process

simple and should make it widely known. Land that is given to the City could either be kept for open space and recreation or sold or traded for property that has more open space and recreation value.

Lease-Back

The process of the City purchasing property and then leasing it to the private sector allows the City to have development controls that it would not otherwise have. This can be a measure of great benefit both to the city and to the developer-lessee. However, it is a process of lasting financial impact and needs to be done in a very thoughtful and detailed manner.

Acquisition

No matter how strigent the land use control system of a city is, a complete open space preservation system will also require an acquisition program.

However, there are problems with acquisition. Between the time that a city states interest in a particular property or properties and the time when it is ready to purchase, the price may have inflated tremendously.

In the case of an unwilling owner, the cost of the condemnation process can be very high. It also happens that when a governmental body, whether it is a city of the Federal Government, expresses an interest in an area, the land speculation process begins and people will bid up the price of land hoping to make a large profit in the anticipated sale to the governmental agency.

It is the law of the land that an owner be paid the "Fair Market Value" for his property.

In anticipation of purchase by a city, the owner of the property may try to rezone the parcel(s) so that he can lay claim to a higher use for his land prior to a condemnation proceeding.

What this specifically means for Brisbane is that when the City considers the purchase of property for a particular use such as a tennis court, swimming pool, etc., it should move ahead as rapidly as possible.

This is important not only to the city, but also to the property owner who may have to put off other plans for his property pending a purchase decision by the city.

A situation could arise in which the city restricts, by ordinance and regulation, the development potential of a property and suggests eventual purchase by the city. The owner might argue that the city is trying to lower the price that it will eventually have to pay for the property.

For this reason it is important that regulations constricting the development potential of a property be founded on sound documentation and criteria. This is one of the purposes for this document.

It should be noted that those properties most severly restricted are those properties that have qualities that the city is most interested in preserving and are usually qualities that make the site of interest as a preservation park or recreation area.

There are alternatives to the full purchase in fee of lands. Some of those alternatives will be listed here. However, to more fully understand these alternatives one can consult any one of a number of studies on acquisition alternatives. We have found the three volume services entitled "How To Implement Open Space Plans, For The San Francisco Bay Area".

This set is a publication of the Association of Bay Area Governments. This is a well documented study and should answer some of the specific questions about the legal options a city has in acquisition of land for parks and open space.

In summation, besides the outright purchase of a property, a city can consider lease-back arrangements, and/or compensable regulation whereby an owner is paid for all or part of the reduction in value of his property caused by restrictive regulations.

A city can require dedications of land for park use as a contingent of the approval of subdivision maps or other governmental approvals.

There are also a myriad of revenue sources that range from a "bedroom tax" to the use of federal and state financing programs.

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